

Bio Sketch

Jyotsna Kumar Mandal
Professor, Computer Science & Engineering,
Former Dean, Faculty of Engineering Technology & Management
University of Kalyani

Department of Computer Science & engineering
University of Kalyani
Kalyani, Nadia, West Bengal 741235
Mail: jkm.cse@gmail.com; jkmandal@klyuniv.ac.in
M:9434352214

Contents

• General Information	3
• About me	4
• Teaching and Research Experiences	5
• Administrative Experiences	6
• Contribution in current research	7
• Administrative responsibilities	8
• Achievements	9
• Honours and awards	9
• Ph. D Guided	9
• Consultancy Experiences as expert	10
• Patents	10
• Participation in national/international flora	10
• Research Projects	11
• Journal and books	11
• Details of Ph. D. guidance	12
• Ten best publications	15
• Sci publications in last 6 years	16
• Publication in journals	18
• Publication in international conferences	26
• Publication in Springer conferences	27
• Publication in Elsevier conferences	30
• Publication in IEEE conferences	31
• Publication in international conference in India	34
• Publication in international conference outside India	37
• Publication in national conference	37
• Publication in IEEE national conference	38
• Book published	40
• Edited books	41
• Edited books based on conferences	41

General information

Name (in Capital Letters)	JYOTSNA KUMAR MANDAL			
Date of Birth (Day/Month/Year)	08-08-1960			
Correspondence Address	A502 Green Valley Housing Complex, Kaikhali Chiriamore, Near New Basanta Sweets, Kolkata 700136, West Bengal, India			
Permanent Address	Vill- Nerakopa, P.O. – Raskundu, PS-Garhbeta, Dist.- Midnapur West, West Bengal, Pin- 721127			
Birth place	Vill- Nerakopa, P.O. Raskundu, PS-Garhbeta, Dist.- Paschim Medinipur (Jangalmahal)			
Phone. No	Mobile No.	(0)9434352214, 8240323373	Landline No.	(033) 46056570
Email:	jkm.cse@gmail.com		Alternate Email, if any	jkmandal@klyuniv.ac.in
Website	http://jkmandal.com			

About me

- Vice Chancellor, Raiganj University, University Road, College Para, Raiganj, West Bengal 733134
- Professor Department of Computer Science & Engineering (in Lien from Kalyani University since 09-03-2023)
- Former Dean Faculty of Engineering Technology & Management (Two Consecutive Terms (2008-2012))
- Former Director, IQAC, KU from 2014 to 2021
- Former Chairman, Centre for Information Resource Management, KU(2014-2022)
- Former Chairman, Placement Cell, KU, 2016-2020
- Former Jt. Director, Centre for Remote Sensing Applications, NBU(1998-2005)
- Former Coordinator, TEQIP I, KGEC (2005-2007)
- Former HoD, CSE KU, CSA KGEC, CSA NBU, Computer Centre NBU
- Former Coordinator, IIPC Cell KU (2009-2012)

Academic Career

- Madhyamik from Raskundu High School, West Midnapur
- 10+2 from Ghatal Vidyasagar High School, West Midnapur
- Graduation B. Sc. (Hon.) in Physics from University of Burdwan in 1983
- Post-Graduation M. Sc. In Physics from Jadavpur University in 1985
- M. Tech. (CS) from Calcutta University in 1987
- Ph. D. (Engg.) from Jadavpur University in 2000

- More than 32 years of teaching and research experience,
- more than 450 publications in international/national journals/conferences out of which more than 45 SCI Publications in last seven years, 190 in international Journals and twelve books published from Springer Nature, LAP Germany, IGI Global and 55 edited volumes published from Springer Nature etc. (see <http://jkmandal.com> for details).
- Last 33 years working as faculty members/researchers and administrator in various capacities as Assistant Professor, Associate Professor, Professor, Vice- Chancellor(in-charge), Jt. Director, Director, Chairman, Head of the departments,
- Former Dean Faculty of Engineering, Technology & Management (two consecutive terms), Former Director, IQAC (2013-2021 at KU),
- Acted as Member of EC, Member of University Court, BOS Member of BHU, Andhra University etc.
- Twenty-nine Scholars awarded Ph. D. degree under my direct supervision, one submitted and four are perusing.
- Received Two Silver Medals from Jadavpur University for Securing Highest Marks
- Received Shiksha Ratna Award from Govt. of West Bengal

Teaching & Research Experiences

Total Teaching experience 33 years, Research experience 2 years with administrative experience as Vice Chancellor

- As Vice Chancellor, Raiganj University since 09-03-2023
- As Professor 18 years
 - Professor in Computer Applications, KGEC 16.03.2005 to 27.03.2007
 - Professor in Computer Science & Engineering, KU 16.03.2005 to 28.03.2007 to till date.
- As Reader (Equivalent Associate Professor) 6 Years 5 Months (17.09.1998 to 15.03 2005) at North Bengal University.
- As Lecturer 9 Years.
 - Lecturer in NERIST 11 months from 06.09.1988 to 10.08.1989
 - Lecturer in the University of North Bengal from 11.07.1990 to 16.09.1998.
- **Research experience 1 yr.: 16.08.1989 to 09.07.1990**
- **Experience as IT expert(trainee): 8 months: 16.11.1987 to 31.08.1988**

Administrative Experiences

Contribution in terms of infrastructure development

1. Expert for Academic Audit in various institutes.
2. Designed and implemented full campus networking consisting of 4Km fiber optic network and 4 Km UTP Network at the University of North Bengal during 1998-2000 from the project fund received from UGC (80 Lakhs).
3. Initiated to open Department of Engineering & Technological Studies, under Engineering Faculty and two streams of undergraduate studies, Information Technology and Electronics and Instrumentation Engineering as Dean Faculty of Engineering, Technology & Management, and University of Kalyani in 2008.
4. Actively involved in infrastructure development, networking, wireless communication between Main campus and Hostel situated at a distance of 2 km from main campus of Kalyani Government Engineering College as Coordinator of TEQIP I in Kalyani Govt. Engg. College, Govt. of West Bengal, during 2006-2007.
5. Domain Expert member of Uttarbanga Krishi Viswavidyalaya nominated by ICAR Govt. of India for planning, designing and implementation of networking and internetworking of Uttarbanga Krishi Viswavidyalaya campus, Coochbehar during my tenure as Head, Department of Computer Science & Application, University of North Bengal during 2002-2004.
6. Domain Expert member of West Bengal University of Animal and Husbandry, Belgachia for designing and implementation of Video Conferencing labs at Belgachia Campus and Haringhata Campus during 2009-10.
7. As Chairman of Center for Information Resource Management, University of Kalyani, implemented wireless connectivity between Central Park and Main Campus of the University of Kalyani.
8. Implemented web based Remote Library Resource Access at the University of Kalyani as Chairman, CIRM.

Contribution in current research

The development and social implication of the developed products by the candidate is many folds. Designed “Low Back Pain Management” software under the leadership of group of doctors as domain designed for Low Back Pain Diagnosis and Management. Research on satellite-based image processing mainly suggested different types of classification and change detection of the forest, shorelines, and future projection of forest and urban areas. Quickly deployable resilient architecture based on four tier communication networks for employment in a post calamity scenario will enhance the accessibility and monitoring of the situation in that area. Developed Morgue Software which has been implemented and successfully run by the authority of Nilratan Sirkar Medical College, Kolkata more than ten years which is secured and authentic information dissemination with provision of integrating same into the portal. 6, 5 and 4nm design of CMOS with enhanced performance compared to existing in terms of ITRA recommendation will enhance the computing power of the microprocessor system. Transform domain computation for authentication and steganographic applications will enhance the social system in telemedicine and banking technology. Compressed sensing-based reconstruction of signal has immense implication for societal need in terms of analytics of information processing.



Current area of research

- Automated Evaluation and Confidence Based Learning (CBL)
- Projected Urban Map of Kolkata 2031(Earth Science, IRS), Sundarban
- Medical Expert System for Low Back Pain
- Compressed Sensing
- Nanoscale CMOS Device for Security Circuit Design

Research outcomes

- 28 scholars Awarded Ph. D Degree under Direct Supervision
- Completed Five Research Projects from AICTE and Govt. of WB
- One Patent Granted in 2021

SCI publications in last five years: 43

2023-1; 2022-5; 2021-9 and one Patent; 2020-8; 2019-6; 2018-10; 2017-4

Highest Impact Factor: Artificial Intelligence in Medicine, Elsevier, IF 7.011 and Cite Score 10.4. Details of publication: Debarpita Santra, Subrata Goswami, Jyotsna Kumar Mandal and Swapan Kumar Basu, Low Back Pain Expert Systems: Clinical Resolution through Probabilistic Considerations and Poset”, Journal Artificial Intelligence in Medicine, Science Direct Elsevier, Volume 120,October 2021, 102163(SCI,IF:7.011)

(<https://www.sciencedirect.com/science/article/pii/S0933365721001561>), September, 2021.

Administrative Responsibilities shouldered

- Vice Chancellor, Raiganj University since 09-03-2023
- Vice- Chancellor (In Charge), Kalyani University, 08.04.2017 to 12.04.2017(5 days)
- NAAC Peer Team Expert as Member and Member Coordinator
- AICTE Expert Committee Member
- Former Chairman CSI Siliguri and Kolkata Chapter
- Former Chairman IETE Kolkata Centre (2020-2022)
- Head of the Departments
- North Bengal University, CSA
- Kalyani Gove Engineering College, CA
- University of Kalyani, CSE
- Superintendent of Boys Hostel (Vivekananda), University of North Bengal for 8 Years
- Dean FETM for two consecutive terms (2008-2012)
- Joint Director, Centre for Remote Sensing Applications (NBU, 1998-2005)
- Member of Executive Council (EC) of University of Kalyani
- Member of the Court, University of Kalyani
- Director, IQAC, University of Kalyani (2013-2021)
- Chairman, Placement Cell, University of Kalyani(2016-2021)
- Chairman, Centre for Information Resource Management, KU, 2014-2022
- Ex BOS member, Andhra University and BHU, CS
- Academic Council Member of JIS College of Engineering(Autonomous) Contribution in terms of Infrastructure Development
- Expert of AICTE Peer Team for EVC.
- Expert of NAAC Peer Team.
- Expert for Academic Audit in various institutes.
- Designed and implemented full campus networking consisting of 4Km fiber optic network and 4Km UTP Network at the University of North Bengal during 1998-2000 from the project fund received from UGC (80 Lakhs).
- Initiated to open Department of Engineering & Technological Studies, under Engineering Faculty and two streams of undergraduate studies, Information Technology and Electronics and Instrumentation Engineering as Dean Faculty of Engineering, Technology & Management, and University of Kalyani in 2008.
- Actively involved in infrastructure development, networking, wireless communication between Main campus and Hostel situated at a distance of 2 km from main campus of Kalyani Government Engineering College as Coordinator of TEQIP I in Kalyani Govt. Engg. College, Govt. of West Bengal, during 2006-2007.
- Domain Expert member of Uttarbanga Krishi Viswavidyalaya nominated by ICAR Govt. of India for planning, designing and implementation of networking and internetworking of Uttarbanga Krishi Viswavidyalaya campus, Coochbehar during my tenure as Head, Department of Computer Science & Application, University of North Bengal during 2002-2004.
- Domain Expert member of West Bengal University of Animal and Husbandry, Belgachia for designing and implementation of Video Conferencing labs at Belgachia Campus and Haringhata Campus during 2009-10.
- As Chairman of Center for Information Resource Management, University of Kalyani, implemented wireless connectivity between Central Park and Main Campus of the University of Kalyani
- Implemented web based Remote Library Resource Access at the University of Kalyani as Chairman, CIRM.

Implementation of Infrastructures

- Campus LAN at NBU (1998-2000).
- 4KM FO and 300 nodes
- Campus LAN at Uttar Banga Krishi Viswavidyalaya(2000-2002) nominated by ICAR as Expert.
- Establishment of Remote Sensing Centre at NBU from the aid of ISRO
- Video Conferencing Lab of University of Animal & Husbandry, WB through FO(WBSWAN)
- Wireless Connectivity(Point to Point) in KGEC ADM and Hostel
- WiFi at the University of Kalyani
- Web Gateway for Library Access of KU Library from anywhere.
- HPC Installation and Dissemination Policy as Chairman, CIRM

Achievements

1	Siksha Ratna award	2018	Department of Higher Education, Government of West Bengal, India
2	Highest Scopus Index based Journal Publications during 2013-2022 from Kalyani University	2013-2022	Highest 203 Scopus based publication in last ten years among all faculty members (220) of the University of Kalyani.
3	Member of ISO – International Organization for Standardization	2020-cont.	ISO/IEC JTC 1/SC 36WG8: Learning Analytics Interoperability
4	Distinguish Membership	2020-cont.	Member of BIS -Bureau of Indian Standard LITD 17 Panel 6 : Information System Security and Privacy LITD 19 Panel 2: e-Learning “User Interface” LITD 36: Computer Hardware, peripherals equipment and

Honors/Awards & Fellowships

Sl. No.	Name of Award/Fellowship etc.	Year of Award	Awarded by
1	A. M. Bose Memorial Silver medal for securing highest marks in the paper “Nuclear Physics and Cosmic Rays” at M. Sc	1985	Jadavpur University
2	Kali Prasanna Dasgupta Memorial Silver medal for securing highest marks in the paper “Nuclear Physics and Cosmic Rays” at M. Sc	1985	Jadavpur University
3	“Bharat Jyoti Award” for meritorious services, outstanding performances and remarkable role in the field of Computer Science & Engineering on 29 th August, 2012	2012	International Friendship Society(IIFS), New Delhi
4	“The Best Citizen of India Award 2012”	2012	The International Publishing House, Delhi, India
5	Biography in Marquis Who’s Who in the World 2014(31st Edition), USA (published in November 2013)	2014	
6	Chapter Patron Award, CSI Kolkata Chapter, 2014	2014	CSI Annual Convention at JNTU, Hyderabad during 14-16 December, 2014
7	Vidyasagar Award	2016	International Society for Science Technology and management in the fifth International Conference on Computing, Communication and Sensor Network, on 25 th December, 2016 at Hotel Golden park, Kolkata, India
8	Rashtriya Pratibha Award	2017	Indo Socio Development Association, Delhi
9	Siksha Ratna award	2018	Department of Higher Education, Government of West Bengal, India
10	Highest Scopus Index based Journal Publications in 2013-2022 from Kalyani University	2013-2022	Highest 203 Scopus based publication in last ten years among all faculty members (220) of the University of Kalyani.
11	Fellow, IETE	2012	Institution of Electronics and Telecommunication Engineers, India

No. of Research Scholars (Ph. D) successfully guided:

Ph. D. Supervision	Affiliated University/Institute	Awarded/ under guidance by	Main Guide
22 in Computer Science & Engineering and 6 in Computer Science	University of North Bengal and University of Kalyani	29	29

Consultancy Experience as expert

S.No	Client 'Organization's name	Nature of Assignment	Duration	Value (in Rs)
1.	Uttarbanga Krishi Vishwavidyalaya	Domain Expert member of Uttarbanga Krishi Vishwavidyalaya nominated by ICAR Govt. of India for planning, designing and implementation of networking and internetworking of Uttarbanga Krishi Vishwavidyalaya campus, Coochbehar during my tenure as Head, Department of Computer Science & Application, University of North Bengal during 2002-2004	Two Years	Honorary
2.	West Bengal University of Animal and Husbandry, Belgachia, Kolkata	Domain Expert member of West Bengal University of Animal and Husbandry, Belgachia for designing and implementation of Video Conferencing labs at Belgachia Campus and Haringhata Campus during 2009-10.	Two Years	Honorary

Patents

Sl. No.	Title of Patent	Organization	Year	Names
1	Enhancing Cyber Security using Hybrid Authentication Technique	Patent Number 2021100948, Innovation Patent, Australian Government, Eight years from 19.02.2021	2021	Gaurav Gambhir, M Gambhir, J K Mandal

Participation and contribution in National / International Fora in the area of academic and professional expertise:

		Numbers(s)
Plenary Lectures / invited talks delivered	International (See Annexure	5
	National	More than 100 lectures in last five years (For more information kindly see the website of Dr. J K Mandal, http://jkmandal.com)
Congress attended	National	More than 30 (in last five years)
	International	
Ph.D Level Examinership, etc.,	International	4
	National	8-10 per year
Others (Specify)	International	International Academic Exposure (For more information kindly see the website of Dr. J K Mandal, http://jkmandal.com)
	National	

Research Projects

1. Modernization of Laboratory Facility (2000-2002) – Rs. 7 Lakhs, Funding Agency: AICTE, Government of India.
2. Microprocessor Based Encoder for Secured Transmission (2002-2005) – Rs. 2 Lakhs, Funding Agency: AICTE, Government of India.
3. GIS Anchored Integrated Plantation Management: Tea 2004- 2007) – Rs. 9.8 Lakhs. Funding Agency: AICTE, Government of India.
4. IIPC Cell - AICTE, Govt. of India (April 2009 to March 2012) – Rs. 10.00 Lakhs, Funding Agency: AICTE, Government of India.
5. MIT, Govt. of West Bengal, Basic Computer Training of School Teachers (July, 2010 to March, 2011) – Rs. 4 Lakhs, Funding Agency: Ministry of Information Technology, Government of West Bengal.

Contributions to Journals and Book

S.No		Numbers already published / presented
1	Book authored (For more information kindly see the website of Dr. J K Mandal, http://jkmandal.com)	In 2020 he has published a text book on Reversible Steganography and Authentication via Transform Encoding from Springer (https://link.springer.com/book/10.1007/978-981-15-4397-5) This book is also translated and published in Chinese in 2021 and published separately by the Springer. Twelve
2	Editor in chief (For more information kindly see the website of Dr. J K Mandal, http://jkmandal.com)	one
3	Editorship (For more information kindly see the website of Dr. J K Mandal, http://jkmandal.com)	55 in Edited Books in International Conferences(Springer etc.)
4	Peer review for	Springer, Elsevier, IEEE journals and conferences(many)
5	Member of the Internationsl Advisory Board (For more information kindly see the website of Dr. J K Mandal, http://jkmandal.com)	Various Conferences(Springers etc.)(many)

Publications

S.No	Category	Numbers already published / presented
1	International Journals (UGC approved list only)	190(For more information kindly see the website of Dr. J K Mandal, http://jkmandal.com)
2	International Conference	228 (For more information kindly see the website of Dr. J K Mandal, http://jkmandal.com)
3	National Journals (UGC approved list only)	
4	National Conference	54 (For more information kindly see the website of Dr. J K Mandal, http://jkmandal.com)
5	Other articles	Kindly see the website of Dr. J K Mandal, http://jkmandal.com

List of scholarly publications in recognized professional and/or academic journals

S. No		Web of Science	Scopus	Goolge Scholar
1	Publication (number as appeared)	149	288	500
2	Citations (Overall)	700	806	3373
3	h-index	12	14	26

Participation and Scholarly presentation in conference:

National

S. No.	Date	Title of Conference or Institution	Title/Subject of Presentation(if made)
			55(For more information kindly see the website of Dr. J K Mandal, http://jkmandal.com)

International

S.No	Category	Number of Presentations
1.	International Conference / Other Event held Abroad	5
2.	International Conference / Other Event held in India	224(For more information kindly see the website of Dr. J K Mandal, http://jkmandal.com)
	Total	229

Technical Details of Ph. D Awarded under J K Mandal (Twenty eight Scholars)

1. Ghosh Alok, Executive Director, Future Group of Institutions, Kolkata, "Towards Design and Implementation of An Approach on CMM(Capability Maturity Model) for the Quality Performance Measurement of Manufacturing Industries, Ph. D.(Engg.), Department of Computer Science & Applications, University of North Bengal, 2004
2. Mal, Satadal, Retired Professor, Department of Electrical Engineering, Kalyani Government Engineering College, Kalyani, Nadia-741235, India, now Principal, Future Institute of Technology, Kolkata "Development of Microprocessor Based Encoders for Secured Transmission", Ph. D.(Engg.), Department of Computer Science & Applications, University of North Bengal, 2004
3. Dutta, Saurabh, Principal, Dr. B. C. Roy Engineering College (WBUT 323), Durgapur, West Bengal, India, "An Approach Towards Development of Efficient Encryption Techniques", Ph. D.(Science), Department of Computer Science & Applications, University of North Bengal, 2005
4. Jha, Pawan, Associate Professor, Department of Computer Science & Technology, Purbanchasi University, Biratnagar, Nepal, "An Approach Towards Design and Implementation of Symmetric Encryption Techniques" Ph. D.(Science), Department of Computer Science & Applications, University of North Bengal, 2008
5. Sinha, Sarad, Assistant Professor, Department of Computer Science & Applications, University of North Bengal, Dist. Darjeeling, West Bengal, India, "An approach Towards Design and Implementation of Microprocessor Based Cryptosystems for secured Transmission", Department of Computer Science & Applications, University of North Bengal, 2008
6. Sarkar Souvik, Vice Principal, R.K.M Residential College, Narendrapur, Kolkata 700103, "Application of Soft Computing Tools for Better Nanodevice Modeling and their Application in Digital Circuits", Department of Computer Science & Engineering, University of Kalyani, submitted on August 31st, 2009(Report Accepted(Ref. No. Ph.D/BRS/Engg. Tech. Mang./2010, dated 15.02.2010 at 1 pm. In the BRS). Awarded on 03rd March, 2010.
7. Das Swarup, Assistant Professor, Department of Computer Science & Applications, University of North Bengal, Dist. Darjeeling, West Bengal, India, "An approach Towards Design of a GIS-Anchored Decision Support System for Tea Management", Department of Computer Science & Applications, University of North Bengal, awarded on May, 2010.
8. Ghoshal Nabin, Scientific Officer, Department of Engineering & Technological Studies, University of Kalyani, Title: "Towards Design and Implementation of Image Authentication/Secrete Message Transmission Technique using Steganographic Approach" submitted for Ph. D.(Engg.), Department of Computer Science & Engineering,

- University of Kalyani, Submitted January 18th, 2011, awarded on July 4, 2011.(Ref. No. Ph. D./Comput. Sc. & Engg./NG/72/2011, dated 06.07.2011).
9. Som Subhranil, Associate Professor, Department of Information Technology, Amity University, Noida, Title: "Towards Design and Implementation of Cryptographic Techniques for Secured Transmission" submitted for Ph. D.(Engg.), Department of Computer Science & Engineering, University of Kalyani, December, 2011, awarded 3rd. September, 2012.
 10. Haldar, Prasun, Associate Professor, Department of Computer Science & Engineering, Purulia Government Engineering College, Purulia, West Bengal: "Towards Design and Implementation of GIS Based Tools and Techniques for Various Applications" submitted for Ph. D.(Engg.),Department of Computer Science & Engineering, University of Kalyani, March 28, 2014.
 11. Pal, Manas, Assistant Professor, Department of Computer Applications, JIS Engineering College, Kalyani, West Bengal, India, "Design and Implementation of Security Systems using Cipher Block Chaining(CBC) Mode" awarded for Ph. D.(Engg.),Department of Computer Science & Engineering, University of Kalyani, September, 26 2014.
 12. Sarkar, Arindam, Assistant Professor, Belur Ramkrishna Mission Vidyamandir, "Towards Design and Implementation of Soft Computing based cryptographic techniques for Wireless Communication" submitted for Ph. D.(Engg.), Department of Computer Science & Engineering, University of Kalyani, November, 28 2014, awarded on July, 9th, 2015.
 13. Mukhopadhyay, Somnath, Assistant Professor, Assam University, Silchar, "Estimation, Suppression and Optimization of Impulses in Digital Imagery",Department of Computer Science & Engineering, University of Kalyani, awarded Ph. D.(Engg.),November, 12 2014, Awarded, July 20, 2015.
 14. Sengupta, Madhumita, Assistant Registrar, IIIT Kalyani, "Towards Design and Implementation of Discrete Transform Image Coding based Document Authentication Techniques" awarded Ph. D.(Engg.), Department of Computer Science & Engineering, University of Kalyani, February, 26 2015, awarded, December, 16, 2015.
 15. Sudipta Kr. Ghosal, Assistant Professor, Future Institute of Technology, Boral Campus, Kolkata, India, "Design and Implementation of Transform Domain Watermarking Techniques for Color Image Authentication" awarded Ph. D.(Engg.), Department of Computer Science & Engineering, University of Kalyani, July 2016.
 16. Rajdeep Chakraborty, Assistant Professor, Netaji Subhas Engineering College, Kolkata, "An Approach Towards Design and Implementation of Microprocessor and FPGA Based Symmetric Encoder for Embedded System" awarded Ph. D.(Engg.), Department of Computer Science & Engineering, University of Kalyani, March, 2017
 17. Uttam, Kr. Mondal, Assistant Professor, Department of Computer Science, Vidyasagar University, "Towards Design and Implementation Of Authentication Techniques To Protect IPR of Quality Songs" awarded Ph. D.(Engg.), Department of Computer Science & Engineering, University of Kalyani, May, 2017.
 18. Kousik Dasgupta, Assistant Professor, CSE, Kalyani Govt. Engineering College, Kalyani, "Design and Implementation of Steganographic Engine for Secret data sharing and Authentication of Videos: An Overture", awarded 23rd June 2017 from department of Computer science & Engineering,University of Kalyani, 2017.
 19. M Marjit Singh, Assistant Professor, CSE, North Eastern Regional Institute of Science & Technology, Arunachal Pradesh, "Towards Design and Implementation of Reliability and Security Mechanism in Mobile Ad Hoc Network", 8th November 2017, Department of Computer Science & Engineering, University of Kalyani, 2017.
 20. Utpal Nandi, Assistant Professor, Computer Science, Vidyasagar University, Midnapur, "A Study Towards Design and Implementation of Data / Image Compression Techniques", 31st January 2018, Department of Computer Science & Engineering, University of Kalyani, 2018.
 21. Amrita Khamrui, Assistant Professor, CSE, Future Institute of Technology & Management, Kolkata, "Genetic Algorithm based Steganography for Image Authentication, 28th March 2018, Department of Computer Science & Engineering, University of Kalyani, 2018.
 22. Parthajit Roy, Assistant Professor, Computer Science, Burdwan University, Burdwan, "Towards Design and Implementation of Graph based Clustering Techniques, Submitted July 2017, Department of Computer Science & Engineering, University of Kalyani, 2017, awarded 7th May 2018.

23. Anirban Chakraborty, Assistant Professor, Barrackpur Rastraguru Surendranath College, Barrackpur, “GIS Anchored Tools and Techniques for Social Utility Services”, submitted January 2018, Department of Computer Science & Engineering, University of Kalyani, November, 2018
24. Amit Kumar Gupta, Central School, Silchar, “Efficient and secure routing in a DTN for a post disaster scenario”, (30th June 2016), submitted 12th March, 2019, awarded 27th November, 2020
25. Rajeev Chatterjee, NITTTR, Kolkata, “A Novel Architecture for Confidence based Learning (CBL)”, submitted 10th March 2021 and awarded 2nd February 2022.
26. Gaurav Gambhir, APIIT, Panipath, Hariyana, “ Study on Shared Memory Implementation of Cryptographic and Steganographic Techniques”, submitted 12th March 2021, awarded 24th March 2022.
27. Debarpita Santra, Research Scholar without Fellowship, University of Kalyani, Kalyani, “**Designing Medical Expert System for Assessment and Management of Low Back Pain with Uncertainty Handling**” (June, 2021th May 2022).
28. Khondekar Lutful Hassan, Assistant Professor, Aliah University, Kolkata, “**Towards Enhancement of Security and Efficiency in MANET**” (24th June, 2022)
29. Krishan Kundu, Assistant Professor, CSE, Govt. Engineering College, Srirampur, Hoogly, Title: Study on GIS Based Classification and Change Detection using Satellite Images for Social Services (awarded 13th March 2023)

Thesis Submitted: One

1. Sujit Das, Assistant Professor, Bharat Institute of Engineering and Technology, Mangalpalle, 501510, Hyderabad, Telengana, Title: Towards Design and Implementation of Efficient Compressed Sensing Techniques.

Registered Scholar: Four

1. Sadhu Prasad Kar, Senior Consultant, Tata Consultancy Services, Kolkata, Title: Design of an Intelligent Assessment Framework.
2. Raktim Chakraborty, Assistant Professor, Surendranath College working on Nano scaled MOSFET and Security Circuit design.
3. Tamal Deb Assistant Professor, Barasat College as Assistant Professor, Computer Science working on Quantum Computing.
4. Shrabanti Kundu, Full time Kanyashree Scholar working on Nano scaled FINFET and Security Circuit design

List of 10 best publications

1. Santra, D., Basu, S. K., Mandal, J. K., & Goswami, S. (2019). Rough set based lattice structure for knowledge representation in medical expert systems: low back pain management case study. *Expert Systems with Applications*, Elsevier (Impact factor: 8.665 (2019)) [SCI], 145,113084, 19 citations.
2. Debarpita Santra, Subrata Goswami, Jyotsna Kumar Mandal and Swapan Kumar Basu, Low Back Pain Expert Systems: Clinical Resolution through Probabilistic Considerations and Poset”, *Journal Artificial Intelligence in Medicine*, Science Direct Elsevier, Volume 120, October 2021, 102163(SCI, IF:7.011) (<https://www.sciencedirect.com/science/article/pii/S0933365721001561>), September, 2021.
3. Krishan Kundu, Prasun Halder & Jyotsna Kumar Mandal, Detection and Prediction of Sundarban Reserve Forest using the CA-Markov Chain Model and Remote Sensing Data”, *Earth Science Informatics* (2021), Springer Nature(17th July 2021(SCIE with IF: 2.878))2021, DOI: <https://doi.org/10.1007/s12145-021-00648-9>, 2021, 3 citation.
4. AK Gupta, I Bhattacharya, PS Banerjee, JK Mandal, A Mukherjee, DirMove: direction of movement-based routing in DTN architecture for post-disaster scenario, *Wireless Networks* (IF:2.701), 22(3), pp.723-740, 2016(389 download, 23 citation)(SCI)
5. Mandal, J K., Chakraborty, R, A 10nm MOS and Its Applications, *Microsystem technologies*, Springer (Microsyst Technol (Feb, 19,2020) (IF:2.012).
6. Krishan Kundu, Prasun Halder & Jyotsna Kumar Mandal (2022), Estimation and Analysis of Change Detection, Forest Canopy Density, and Forest Fragmentation: A Case Study of the Indian Sundarbans, *Journal of Sustainable Forestry*, SCIE(IF:1.595); DOI: 10.1080/10549811.2022.2059515, published 30th March 2022, link: <https://www.tandfonline.com/doi/full/10.1080/10549811.2022.2059515>
7. Kundu, K, Mandal, J K., Halder, P, Urban Change Detection Analysis during 1978-2017 in Kolkata, India using Multi-temporal Satellite Data, *Journal of the Indian Society of Remote Sensing* (Sept., 2020) (SCIE, IF: 1.894).
8. Santra, D., Mandal, J. K., Basu, S.K. et al. Medical expert system for low back pain management: design issues and conflict resolution with Bayesian network. *Med Biol Eng Comput* (2020). <https://doi.org/10.1007/s11517-020-02222-9>, Springer(SCI, IF-3.079), 7 September,2020
9. Das, S, Mandal, J K., An enhanced block based Compress Sensing Technique using orthogonal matching pursuit, *Signal, Image and Video Processing*, Springer (2020) (SCI, IF 2.157), 1 citation.
10. Ghoshal, N., Mandal, J.K. & Khamrui, A. An Authentication Technique for Image/Legal Document (ATILD). *J Sign Process Syst* 67, 187–199 (2012). <https://doi.org/10.1007/s11265-010-0557-7> (SCI IF 1.813)

For citation and impact factor please see following links

- **Google Scholar Citation:** Document 502, Citation 3621, h-index 26, i10-index 97 (http://scholar.google.com/citations?hl=en&user=Nllye4UAAAAJ&view_op=list_works&pagesize=20)
- **Research Gate:** Document 395, citation 2,515, h-index 22 (https://www.researchgate.net/profile/Jyotsna_Mandal/)
- **Scopus Citation:** Document 290, Citation 838, h-index 14 (<http://www.scopus.com/authid/detail.url?authorId=24605629500>)
- **Web of Science Citation:** Document 188, Citation 620, h-index 12 (<https://www.mendeley.com/profiles/jyotsna-kumar-mandal/publications>)

SCI Publications in last six years (2022-2014)

2023

1. Das, S., Mandal, J.K. A modified column block Toeplitz matrix for compressed sensing. Signal, Image and Video Processing(SIViP) (2023). <https://doi.org/10.1007/s11760-023-02529-8>, Springer Nature(SCIE, IF:1.583), March 4 2023
2. Jyotsna Kumar Mandal, Srishiti Dey, and Ajay Kumar, A Steganographic Approach for Secured Communication via Boustrophedon Transformation to Develop IoT Based Smart City, IETE Journal of Research, Taylor & Francis (SCI, IF: 1.877) (Oct. 2022) (published on line).

2022

1. Bandyopadhyay, S., Thakur, S.S. & Mandal, J.K. Emotion Detection for online recommender system using deep learning: a proposed method, Innovations Syst Softw Eng 17th May, 2022. <https://link.springer.com/article/10.1007/s11334-022-00437-7>
2. Krishan Kundu, Prasun Halder & Jyotsna Kumar Mandal (2022) Estimation and Analysis of Change Detection, Forest Canopy Density, and Forest Fragmentation: A Case Study of the Indian Sundarbans, Journal of Sustainable Forestry, SCIE(IF:1.515); DOI: 10.1080/10549811.2022.2059515, published 30th March 2022, link: <https://www.tandfonline.com/doi/full/10.1080/10549811.2022.2059515>
3. Priyadarshini R, Chintalapati R, Nath V, Shylashree N, Sharma J B, Mandal, J K, "A Novel Approach for Node localization in Wireless Multimedia Sensor Network", IETE Journal of Research, communicated May 2, 2022.
4. Ghosh, S, Chakraborty, A, Mandal, J K, "Fusion: An EXOR Based Vertex Synthesis to Minimize Switching Functions", Theory of computing Systems, Springer Nature(SCI, IF:0.582)(communicated on 12th May,2022).(<https://www.springer.com/journal/224>).
5. Ghosh, P., Goto, T., Mandal, J.K. et al. View materialization using fuzzy MAX-MIN composition with association rule mining (VMFCA). Innovations Syst Softw Eng (2022). <https://doi.org/10.1007/s11334-022-00484-0>

2021

Patents:

Patent Title: Enhancing Cyber Security using Hybrid Authentication Technique, Gaurav Gambhir, M Gambhir, J K Mandal, Patent Number 2021100948, Innovation Patent, Australian Government, Eight years from 19.02.2021.

6. Santra, D., Basu, S. K., Mandal, J. K., & Goswami, S. (2019). Rough set based lattice structure for knowledge representation in medical expert systems: low back pain management case study. Expert Systems with Applications, Elsevier (Impact factor: 6.954 (2019)) [SCI], 145,113084
7. Kundu, K, Halder P and Mandal, J K, Change Detection and Patch Analysis of Sundarban Forest During 1975–2018 Using Remote Sensing and GIS Data, SN Computer Science , Springer(June 2021), 2:364.
8. Debarpita Santra, Subrata Goswami, Jyotsna Kumar Mandal and Swapan Kumar Basu, Low Back Pain Expert Systems: Clinical Resolution through Probabilistic Considerations and Poset", Journal Artificial Intelligence in Medicine, Science Direct Elsevier, Volume 120, October 2021, 102163(SCI, IF:5.326) (<https://www.sciencedirect.com/science/article/pii/S0933365721001561>), September, 2021.
9. Krishan Kundu, Prasun Halder & Jyotsna Kumar Mandal, Detection and Prediction of Sundarban Reserve Forest using the CA-Markov Chain Model and Remote Sensing Data", Earth Science Informatics (2021), Springer Nature(17th July 2021(SCIE with IF: 2.878))2021, DOI: <https://doi.org/10.1007/s12145-021-00648-9>, 2021.
10. M Marjit Sing, Mandal, J K, A Novel Wide & Deep Transfer Learning Stacked GRU Framework for Network Intrusion Detection, Journal of Information Security Applications, ELSEVIER, Vol 91, SCIE(IF 3.872), June, 2021, <https://doi.org/10.1016/j.jisa.2021.102899>, <https://www.sciencedirect.com/science/article/pii/S2214212621001265>.
11. Soumak Sadhukhan, P.K. Mishra, S.K. Basu, J.K. Mandal, A multi-scale agent-based model for avascular tumour growth, Biosystems, Volume 206,2021, 104450,ISSN 0303-2647,<https://doi.org/10.1016/j.biosystems.2021.104450>. ELSEVIER SCI, SCIE with IF:1.808. (<https://www.sciencedirect.com/science/article/pii/S0303264721001040>).
12. Arindam Sarkar, Moirangthem Marjit Singh, Jyotsna Kumar Mandal, Neural Synchronization guided Concatenation of Header and Secret Shares for Secure transmission of Patients' Electronic Medical Record: Enhancing Telehealth Security for COVID-19, Arabian Journal for Science and Engineering(SCIE, IF 2.334, Springer Nature, January 2021.
13. Gambhir, G and Mandal, J K, Shared memory implementation and performance analysis of LSB steganography based on chaotic tent map, Innovations in Systems and Software Engineering, <https://doi.org/10.1007/s11334-021-00385-8>(March 2021)
14. Bandyopadhyay, S., Thakur, S.S. & Mandal, J.K. Product recommendation for e-commerce business by applying principal component analysis (PCA) and K-means clustering: benefit for the society. Innovations Syst Softw Eng 17, 45–52 (2021). <https://doi.org/10.1007/s11334-020-00372-5>

2020

15. Santra, D., Mandal, J. K., Basu, S.K. et al. Medical expert system for low back pain management: design issues and conflict resolution with Bayesian network. Med Biol Eng Comput (2020). <https://doi.org/10.1007/s11517-020-02222-9>, Springer(SCI, IF-2.6022), 7 September,2020.

16. Soma Bandyopadhyay, S. S. Thakur, J. K. Mandal, Product recommendation for e-commerce business by applying principal component analysis (PCA) and K-means clustering: benefit for the society, *Innovations in Software and Systems Engineering (NASA Journal)*, Springer, SCIMago, June, 2020
17. Mandal, J. K., Chakraborty, R. A 10nm MOS and Its Applications, *Microsystem technologies*, Springer (Microsyst Technol (Feb, 19,2020) (IF:1.581).
18. Kundu, K, Mandal, J. K., Halder, P, Urban Change Detection Analysis during 1978-2017 in Kolkata, India using Multi-temporal Satellite Data, *Journal of the Indian Society of Remote Sensing* (Sept., 2020) (SCIE, IF: 1.563)
19. Das, S, Mandal, J. K., An enhanced block based Compress Sensing Technique using orthogonal matching pursuit, *Signal, Image and Video Processing*, Springer (2020) (in press)(SCI, IF 2.157).
20. Gambhir, G. & Mandal, J.K. Multicore implementation and performance analysis of a chaos based LSB steganography technique, *Microsystem technologies*, Springer (Microsyst Technol (2020) 25: 1669. <https://doi.org/10.1007/s00542-020-04762-4>) Feb. 2020 (IF:2.276).
21. Das, S., Mandal, J.K. Saliency detection via outlier pursuit in compress domain (SDOPCD). *Microsyst Technol* (2020). <https://doi.org/10.1007/s00542-020-04769-x>
22. Santra, D., Mandal, J. K., Basu, S. K., & Goswami, S. (2019). Addressing Design Issues in Medical Expert System for Low Back Pain Management: Knowledge Representation, Inference Mechanism, and Conflict Resolution Using Bayesian Network. *Medical & Biological Engineering & Computing*, Springer (Impact factor: 2.039 (2019) [SCI]) [In revision]

2019

23. Hassan, K. L., Mandal, J. K., Mondal, S, Enhanced Trust-based Intrusion Detection System in MANET, *Journal of Scientific & Industrial Research(JSIR)*, Vol. 78, August 2019, pp. 509-512, 2019(IF:0.735)
24. Chakraborty, R. & Mandal, J.K. An FPGA based cascaded CBC block cipher through RPSPNC and TE, *Microsystem technologies*, Springer (Microsyst Technol (2019) 25: 1669. <https://doi.org/10.1007/s00542-017-3458-x>) May 2019, Volume 25, Issue 5, pp 1669–1677(IF:1.581).
25. Chakraborty, R, Mandal, J K, An FPGA based non-feistel block cipher through recursive substitutions of bits on prime-nonprime detection of sub-stream (RSBPND), *Microsystem Technologies* (2019) (Microsyst Technol (2019) 25: 1679. <https://doi.org/10.1007/s00542-017-3662-8>), May 2019, Volume 25, Issue 5, pp 1679–1687(IF:1.581)
26. Hassan, K. L., Mandal, J. K. (2019), “Risk Factor Based Ad-hoc On Demand Multipath Distance Vector Routing Protocol (RF-AOMDV)”, *JSIR (SCI E Journal)*, (vol 78, pp 746-750, Nov, 2019) (IF:0.557).
27. Dutta, P., Chatterjee, R. & Mandal, J.K.(2019) , “An approach for deployment of BRS in software-defined network”, *Innovations Syst Softw Eng(ESCI)* (2019). <https://doi.org/10.1007/s11334-019-00340-8>, A Nasa journal, Springer, pp 1-7(IF:1.10)
28. Kundu K., Halder P., Mandal J.K. (2019) Forest Cover Change Analysis in Sundarban Delta Using Remote Sensing Data and GIS. In: Mandal J., Sinha D. (eds) *Intelligent Computing Paradigm: Recent Trends. Studies in Computational Intelligence (Web of Science Indexed)*, vol 784, pp 85-101, https://doi.org/10.1007/978-981-13-7334-3_7, Springer, Singapore.

2018

29. Das, S., Mandal, J.K, An information Hiding scheme in wavelet domain using Chaos dynamics, *Journal of scientific & industrial research*, vol 77, May 2018, pp 264-267.
30. Saha, S Ghoshal, S K Chakraborty A, Drargupta S, Sarkar, Mandal, J K, Improved exploiting modification direction-based steganography using dynamic weightage array, *Electronica Letters*, Vol. 54 No. 8 pp. 498-500, (IF:1.59)19th April, 2018(2018)
31. R Chatterjee, R Chakraborty, J K Mandal (2018), Design of Cryptographic model for End-to-End Encryption in FPGA based systems *Microsystems Technology*, Springer (SCI)(online first), (IF:1.581)
32. Mandal J., K., Chakraborty Raktim “Design of 4nm MOSFET and its Applications”, *Microsystem Technology*, Springer, July 2018 (SCI) (online first) (IF:1.581).
33. Ghosal, S and Mandal, J., K., “High Payload Image Steganography based on Laplacian of Gaussian (LoG) Edge Detector”, *Multimedia Tools and Applications* (IF:1.530), Springer (Science Citation Index Expanded (SciSearch), May, 2018.
34. Ghosal, S and Mandal, J., K., On the use of the Stirling Transform in Image Steganography, *Journal of Information Security and Applications* (IF:1.357), Elsevier (in Press), 2018
35. Mandal, J. K., Das, S.(2018), An Information Hiding Scheme in Wavelet Domain using Chaos Dynamics, *Journal of Scientific and Industrial Research* (IF:0.557), ISSN: 0022-4456(SCI)(Vol 77(05), pp264-267
36. Chatterjee R, Mandal J. K., (2018), A Content Proposer System (CPS) based on deficiencies of Confidence Based Learning (CBL), *Journal of Scientific and Industrial Research* (IF:0.557), ISSN: 0022-4456. (SCI), Vol. 78(1), pp 35-38
37. Das, S, Mandal, J. K., Secured Hand Sacking Based Two Phase Data Concealing Architecture in Spectral Domain, *Microsystem Technology* (IF:1.581), Springer (Online first) March 2018(SCI)
38. Shaswata Saha ; Sudipta Ghosal ; Anuran Chakraborty ; Souvik Dhargupta ; Ram Sarkar ;Jyotsna Mandal, “Improved exploiting modification direction based steganography using dynamic weightage array”, *Electronics Letters*, IET Digital Library(IF:1.155), DOI: 10.1049/el.2017.3336 , Print ISSN 0013-5194, Online ISSN 1350-911X Available online: 02 March 2018(SCI)(IF:1.232).

2017

39. Chakraborty Rajdeep and Mandal J.K., Recursive Substitutions of Bits on Prime-Nonprime Detection of Sub-stream: FPGA Based Non-Feistel Block Cipher, *Microsystem Technology* (IF:1.581), Springer, 2017(SCI) (online first) (2017)
40. Amit Kumar Gupta I, Jyotsna Kumar Mandal, Indrajit Bhattacharya I Tamal Mondal and & Sourav Sanu Shaw (2017), “CTMR-collaborative time-stamp based multicast routing for delay tolerant networks in post disaster scenario”, *Peer-to-Peer Netw. Appl.* (IF:1.514), Springer, DOI 10.1007/s12083-016-0533-5, 16th Nov.2017
41. Singh, M.M. and Mandal, J.K. (2017), “Reliability of MANET under the Influence of Black Hole Attack in Adhoc On Demand Distance Vector Routing Protocol”, *Journal of Scientific and Industrial Research* (IF:537), vol 76(07), 2017, pp 423-426, ISSN: 0022-4456. (SCI)(2017)

42. Singh, M.M. and Mandal, J.K., “Logistic regression-based reliability analysis for mobile ad hoc network with fixed maximum speed and varying pause times”, *Journal of Scientific & Industrial Research* (**IF:537**), Vol.76 (02) 2017, pp 81-84, ISSN: 0022-4456(SCI) (2017)
- 2016**
43. Utpal Nandi & Jyotsna Kumar Mandal (2016), Efficiency of adaptive fractal image compression with archetype classification and its modifications, *International Journal of Computers and Applications*, 38:2-3, 156-163; Taylor & Francis (**SCIMago**)link: <http://dx.doi.org/10.1080/1206212X.2016.1237130>
44. Singh, M.M. and Mandal, J.K. (2016), “Logistic Regression Based Reliability Analysis for Mobile Ad hoc Network with Fixed Maximum Speed and Varying Pause Times”, *Journal of Scientific and Industrial Research*. (SCI, IF:537), ISSN: 0022-4456, Vol. 76, pp 81-84
45. Arindam sarkar, Jyotsna Kumar Mandal (2015), Cryptanalysis of Key Exchange Method in Wireless Communication. *International Journal of Network Security* (**SCIMago**), Vol.17, No.4, PP.484-493, July 2015
46. AK Gupta, I Bhattacharya, PS Banerjee, JK Mandal, A Mukherjee, DirMove: direction of movement-based routing in DTN architecture for post-disaster scenario, *Wireless Networks* (**IF:1.981**), 22(3), pp.723-740,2016(389 download, 4 citation)(SCI)
47. D Acharya, A Mukherjee, J K Mandal, NMukherjee (2016), Activity Recognition System Using Inbuilt Sensors of Smart Mobile Phone and Minimizing Feature Vectors. *Microsystem Technology* (**IF:1.581**), Springer, Volume 22 Issue 11, pp 2715-2722(SCI)
- 2015**
48. Arindam Sarkar, Jyotsna Kumar Mandal(2015), Cryptanalysis of Key Exchange Method in Wireless Communication, *International Journal of Network Security*, Vol.17, No.4, PP.484-493(SCIMago)
- 2014**
49. Mukhopadhyay, S and Mandal, J. K. (2014), A Fuzzy Switching Median Filter of Impulses in Digital Imagery (FSMF), *Circuits, Systems, and Signal Processing* (IF:1.998), February 2014, DOI:10.1007/s00034-014-9739-z,ISSN: 0278-081X, Springer US, <http://link.springer.com/article/10.1007%2Fs00034-014-9739-z>, Volume 33 Issue 7, pp 2193-2216

Publications in Journals (SCI Publications may be repeated)

1. Bandyopadhyay, S., Thakur, S.S. & Mandal, J.K. Emotion Detection for online recommender system using deep learning:a proposed method, *Innovations Syst Softw Eng* 17th May, 2022. <https://link.springer.com/article/10.1007/s11334-022-00437-7>
2. Ghosh, P, Sadhu, Deep, Mandal, J K, Mandal, J K and Sen, S, RHProphet: An Enhanced Sales Forecasting Model, *International Journal for Computers & Their Applications* . Dec2021, Vol. 28 Issue 4, p212-221. 10p. <https://doi.org/10.1145/3468081.3471064>
3. Debarpita Santra, Subrata Goswami, Jyotsna Kumar Mandal and Swapan Kumar Basu, Low Back Pain Expert Systems: Clinical Resolution through Probabilistic Considerations and Poset”, *Journal Artificial Intelligence in Medicine, Science Direct Elsevier*, Volume 120, October 2021, 102163(SCI, IF:5.326) (<https://www.sciencedirect.com/science/article/pii/S0933365721001561>), September, 2021.
4. M Marjit Sing, Mandal, J K, A Novel Wide & Deep Transfer Learning Stacked GRU Framework for Network Intrusion Detection, *Journal of Information Security Applications, ELSEVIER, SCIE(IF 2.327)*, June, 2021.
5. Kundu, K, Mandal, J K, Halder, P Change detection and patch analysis of Sundarban forest during 1975-2018 using remote sensing and GIS data, *J. SN Computer Science, Springer Nature*, June 2021.
6. Arindam Sarkar · Moirangthem Marjit Singh · Jyotsna Kumar Mandal, Neural Synchronization guided Concatenation of Header and Secret Shares for Secure transmission of Patients’ Electronic Medical Record: Enhancing Telehealth Security for COVID-19, *Arabian Journal for Science and Engineering(SCIE, IF 2.074)*, Springer Nature, January 2021.
7. Santra, D., Mandal, J. K., Basu, S.K. et al. Medical expert system for low back pain management: design issues and conflict resolution with Bayesian network. *Med Biol Eng Comput* (2020). <https://doi.org/10.1007/s11517-020-02222-9>, Springer (SCI, IF-2.022), 7 September,2020.
8. Soma Bandyopadhyay, S. S. Thakur, J. K. Mandal, Product recommendation for e-commerce business by applying principal component analysis (PCA) and K-means clustering: benefit for the society, *Innovations in Software and Systems Engineering(NASA Jpurnal)*, Spinger, SCIMago, June, 2020
9. Santra D., Basu S.K., Mandal J.K., Goswami S. (2020) Lattice-Based Fuzzy Medical Expert System for Management of Low Back Pain: A Preliminary Design. In: Mandal J., Banerjee S. (eds) *Intelligent Computing: Image Processing Based Applications. Advances in Intelligent Systems and Computing*, vol 1157. Springer, Singapore. https://doi.org/10.1007/978-981-15-4288-6_8, pp.119-129
10. Mondal U.K., Debnath A., Mandal J.K. (2020) Deep Learning-Based Lossless Audio Encoder (DLLAE). In: Mandal J., Banerjee S. (eds) *Intelligent Computing: Image Processing Based Applications. Advances in Intelligent Systems and Computing*, vol 1157. Springer, Singapore. https://doi.org/10.1007/978-981-15-4288-6_6, pp. 91-101,2020
11. Mandal, J K., Chakraborty, R, A 10nm MOS and Its Applications, *Microsystem technologies, Springer (Microsyst Technol* (2020) 2020 (SCI IF: 1.581).

12. Kundu, K, Mandal, J K., Halder, P, Urban Change Detection Analysis during 1978-2017 in Kolkata, India using Multi-temporal Satellite Data, *Journal of the Indian Society of Remote Sensing* (Sep., 2020) (SCIE, IF:1.102)
13. Das, S, Mandal, J K., An enhanced block based Compress Sensing Technique using orthogonal matching pursuit, *Signal, Image and Video Processing*, DOI :10.1007/s11760-020-01777-2, Springer (2020) (online first) (SCI, IF 1.824), pp. 1-8.
14. S Bandyopadhyay, S. S. Thakur and J. K. Mandal, Product Recommendation for E-Commerce Business by Applying Principal Component Analysis (PCA) and K-Means Clustering: Benefit for the Society Innovations in Systems and Software Engineering: A NASA Journal(2020)(August,25,2020)(SCIM/SCI)
15. Gambhir, G. & Mandal, J.K. Multicore implementation and performance analysis of a chaos based LSB steganography technique, *Microsystem technologies*, Springer (*Microsyst Technol* (2020) 25: 1669. <https://doi.org/10.1007/s00542-020-04762-4>) Feb. 2020 (SCI IF:1.581).
16. Das, S., Mandal, J.K. Saliency detection via outlier pursuit in compress domain (SDOPCD). *Microsyst Technol* (2020). <https://doi.org/10.1007/s00542-020-04769-x>(SCI IF:1.581).
17. Santra, D., Basu, S. K., Mandal, J. K., & Goswami, S. (2019). Rough set based lattice structure for knowledge representation in medical expert systems: low back pain management case study. *Expert Systems with Applications*, Elsevier (Impact factor: 4.292 (2019)) [SCI] [In press]
18. Santra, D., Mandal, J. K., Basu, S. K., & Goswami, S. (2019). Addressing Design Issues in Medical Expert System for Low Back Pain Management: Knowledge Representation, Inference Mechanism, and Conflict Resolution Using Bayesian Network. *Medical & Biological Engineering & Computing*, Springer (Impact factor: 2.039 (2019) [SCI]) [In revision]
19. Hassan, K L, Mandal, J K, Mondal, S, Enhanced Trust-based Intrusion Detection Syatem in MANET,*Journal of Scientific & Industrial Research(JSIR)*, Vol. 78, August 2019, pp. 509-512, 2019(**IF:0.735**)
20. Chakraborty, R. & Mandal, J.K. An FPGA based cascaded CBC block cipher through RSPNC and TE, *Microsystem technologies*, Springer (*Microsyst Technol* (2019) 25: 1669. <https://doi.org/10.1007/s00542-017-3458-x>) May 2019, Volume 25, Issue 5, pp 1669–1677(**IF:1.581**).
21. Chakraborty, R, Mandal, J K, An FPGA based non-feistel block cipher through recursive substitutions of bits on prime-nonprime detection of sub-stream (RSBPNDs), *Microsystem Technologies* (2019) (*Microsyst Technol* (2019) 25: 1679. <https://doi.org/10.1007/s00542-017-3662-8>), May 2019, Volume 25, Issue 5, pp 1679–1687(**IF:1.581**)
22. Hassan, K. L., Mandal, J. K. (2019), “Risk Factor Based Ad-hoc On Demand Multipath Distance Vector Routing Protocol (RF-AOMDV)”, *JSIR (SCI E Journal)*, (**IF:0.735**)
23. Dutta, P., Chatterjee, R. & Mandal, J. K. (2019) , “An approach for deployment of BRS in software-defined network”, *Innovations Syst Softw Eng* (2019). <https://doi.org/10.1007/s11334-019-00340-8>, A Nasa Journal, Springer, pp 1-7. (SCIM/SCI)
24. Kundu K., Halder P., Mandal J.K. (2019) Forest Cover Change Analysis in Sundarban Delta Using Remote Sensing Data and GIS. In: Mandal J., Sinha D. (eds) *Intelligent Computing Paradigm: Recent Trends*. *Studies in Computational Intelligence*, vol 784, pp 85-101. https://doi.org/10.1007/978-981-13-7334-3_7, Springer, Singapore.
25. Hassan, K. L., Mandal, J. K., Enhanced Trust-based Intrusion Detection System in MANET, *JSIR(SCI E Journal)*, (In Press), 2019
26. Hassan, K. L., Mandal, J. K., Risk Factor Based Ad-hoc On Demand Multipath Distance Vector Routing Protocol (RF-AOMDV), *JSIR(SCI Journal)*, (accepted), 2019
27. Debarpita Santra, S K Basu, J K Mandal, S Goswami(2019),Rough set based lattice structure for knowledge representation in medical expert systems: low back pain management case study, *Expert Systems With Applications*.
28. Chatterjee, R and Mandal J K,(2019),A content proposer system(CPS) based on deficiencies of confidence based learning(CBL), *journal of Scientific and Industrial Research*, vol 78, January 2019, pp.33-38(SCI, IF 0.5)
29. Rajeev Chatterjee, Sadhu Prasad Kar, Jyotsna Kumar Mandal “An Intelligent Prescription of Content Modelling for A Typical Learner”, *International Journal of Computer Science & Engineering*, Vol 7. Special issue 1 Jan 2019,pp.12-131.
30. Krishan Kundu1, Prasun Halder, Jyotsna Kumar Mandal,Estimation of changes of vegetation cover in Sundarban using multi-temporal satellite data *Advances in Modelling and Analysis D*,Vol. 23, No. 1, December, 2018, pp. 19-26,*Journal homepage:http://iicta.org/Journals/AMA/AMA_D* (Dec., 2018)
31. Saha, S, Ghoshal, S K Chakraborty A, Drargupta S, Sarkar, Mandal, J K, Improved exploiting modification direction-based steganography using dynamic weightage array, *Electronica Letters*, Vol. 54 No. 8 pp. 498-500, 19th April, 2018(2018)
32. R Chatterjee, R Chakraborty, J K Mandal, Design of Cryptographic model for End-to-End Encryption in FPGA based systems *Microsystems Technology*, Springer(SCI)(online first), 2018.
33. Krishan Kundu1, Prasun Halder, Jyotsna Kumar Mandal, “Estimation of changes of vegetation cover in Sundarban using multi-temporal satellite data”. *Advances in Modelling and Analysis D (AMSE)* Vol. 23, No. 1, December, 2018, pp. 19-26.
34. K. Kundu, P. Halder, J. K. Mandal, "A Digitization of Polygon Objects in a Raster Map Based On the Direction". *International Journal of Computer Applications (IJCA)* ISSN: 0975 – 8887 Vol.- 162 No.-3, 2017, pp.-10-16.
35. Mandal J., K., Chakraborty Raktim “Design of 4nm MOSFET and its Applications”, *Microsystem Technology*, Springer, 2018 (SCI) (in press).
36. Ghosal, S and Mandal, J., K., “High Payload Image Steganography based on Laplacian of Gaussian (LoG) Edge Detector”, *Multimedia Tools and Applications*,(IF:1.530), Springer(Science Citation Index Expanded (SciSearch))
37. Ghosal, S and Mandal, J., K., On the use of the Stirling Transform in Image Steganography, *Journal of Information Security and Applications*, Elsevier(accepted and revised version submitted).
38. Mandal, J. K., Das, S An Information Hiding Scheme in Wavelet Domain using Chaos Dynamics, *Journal of Scientific and Industrial Research*, ISSN: 0022-4456.(SCI) 2018)
39. Chatterjee R, Mandal J. K., A Content Proposer System (CPS) based on deficiencies of Confidence Based Learning (CBL), *Journal of Scientific and Industrial Research*, ISSN: 0022-4456.(SCI)(accepted)(2018)
40. Das, S, Mandal, J. K.,Secured Hand Sacking Based Two Phase Data Concealing Architecture in Spectral Domain, *Microsystem Technology*, Springer(<https://link.springer.com/article/10.1007/s00542-018-3843-0>) March 2018(SCI)
41. Shaswata Saha ; Sudipta Ghosal ; Anuran Chakraborty ; Souvik Dhargupta ; Ram Sarkar ;Jyotsna Mandal, “Improved exploiting modification direction based steganography using dynamic weightage array”, *Electronics Letters*, IET Digital Library, DOI: 10.1049/el.2017.3336 , Print ISSN 0013-5194, Online ISSN 1350-911X Available online: 02 March 2018(SCI).
42. Chakraborty Rajdeep and Mandal J.K. ,Recursive Substitutions of Bits on Prime-Nonprime Detection of Sub-stream: FPGA Based Non-Feistel Block Cipher, *Microsystem Technology*, Springer, 2017(SCI) (online first)

43. Amit Kumar Gupta, Jyotsna Kumar Mandal, Indrajit Bhattacharya, Tamal Mondal and Sourav Sanu Shaw, "CTMR-collaborative time-stamp based multicast routing for delay tolerant networks in post disaster scenario", *Peer-to-Peer Netw. Appl.*, Springer, DOI 10.1007/s12083-016-0533-5, 16th Nov. 2017
44. Raktim Chakraborty, Jyotsna Kumar Mandal, "Modeling of 5nm Gate length n-type MOSFET", *The CSI Journal of Computing*, Volume 3, Issue 3, October 2017, e-ISSN: 2277-7091, PP 14-17.
45. Singh, M.M. and Mandal, J.G.(2017), "Reliability of MANET under the Influence of Black Hole Attack in Adhoc On Demand Distance Vector Routing Protocol", *Journal of Scientific and Industrial Research* vol 76(07), 2017, pp 423-426, ISSN: 0022-4456.(SCI)
46. Singh, M.M. and Mandal, J.K.(2017), "Impact of Black Hole Attack on Reliability of Mobile Ad Hoc Network under DSDV Routing Protocol", *International Journal of Systems, Control and communications* Vol.9, No.1, pp.20-30, ISSN: 1755-9340.(2018) (SCOPUS).
47. Kundu, K, Halder, P, Mandal, J K, Digitization of Polygon Objects in a Raster Map based on the Direction, *International Journal of Computer Applications* (0975 – 8887) Volume 162 – No 3, March 2017
48. Singh, M.M. and Mandal, J.K., "Logistic regression based reliability analysis for mobile ad hoc network with fixed maximum speed and varying pause times", *Journal of Scientific & Industrial Research*, Vol.76 (02) 2017, pp 81-84, ISSN: 0022-4456(SCI)
49. Utpal Nandi & Jyotsna Kumar Mandal (2016), Efficiency of adaptive fractal image compression with archetype classification and its modifications, *International Journal of Computers and Applications*, 38:2-3, 156-163; link: <http://dx.doi.org/10.1080/1206212X.2016.1237130>
50. AK Gupta, I Bhattacharya, PS Banerjee, JK Mandal, A Mukherjee, DirMove: direction of movement based routing in DTN architecture for post-disaster scenario, *Wireless Networks*, 22(3), pp.723-740, 2016
51. Kundu K, Halder P, Mandal JK.(2016), "A GIS Based Tool to Digitize Polygon and Line Segments of a Black and White Map", *Journal of Remote Sensing & GIS(JoRSG)*, ISSN: 2230-7990(online), 2016; Vol. 7 No.1, pp. 27–41.
52. Amit Kumar Gupta, Jyotsna Kumar Mandal, Indrajit Bhattacharya(2016), Mitigating Selfish, Blackhole and Wormhole Attacks in DTN in a Secure Co-operative, *International Journal of Information and Computer Security*, 2016(In Press).
53. Amit Kumar Gupta, Jyotsna Kumar Mandal, Indrajit Bhattacharya, Tamal Mondal, Sourav Sanu Shaw(2016), CTMR-collaborative time-stamp based multicast routing for delay tolerant networks in post disaster scenario, *Peer-to-Peer Networking and Applications*, Springer pp.1-19, 2016
54. K Kundu, P Haldar, J K Mandal(2016), An Efficient Method to Digitize Polygon Objects of a Black and White Raster Map, *IJCSI International Journal of Computer Science Issues*, Volume 13, Issue 4, July 2016, ISSN (Print): 1694-0814 | ISSN (Online): 1694-0784, pp 90-99.(2016)
55. Madhuchhanda Dasgupta and J. K. Mandal(2016), Bit-plane Oriented Image Encryption through Prime-Nonprime based Positional Substitution(BPIEPNPS), *International Journal of Computer Sciences and Engineering*, E-ISSN: 2347-2693, Volume-4, Special Issue-6, pp. 65-70, Aug 2016,
56. J. K. Mandal, Khondekar Lutful Hassan(2015), Analysis of Black Hole and Gray Hole Attack in MANET, based on Simulation through NS2, *AMSE JOURNALS – 2015-Series: Advances D; Vol. 20; N° 1*; pp 35-46, Submitted April 2015; Revised Sept. 21, 2015; Accepted Nov. 30, 2015
57. Parthajit Roy, J.K. Mandal, "A Novel Spectral Clustering based on Local Distribution", *International Journal of Electrical and Computer Engineering (IJECE)*, Vol. 5, No. 2, April 2015, pp. 361-370, ISSN: 2088-8708
58. D Acharya, A Mukherjee, J K Mandal, N Mukherjee(2015), Activity Recognition System Using Inbuilt Sensors of Smart Mobile Phone and Minimizing Feature Vectors. *Microsystem Technology*, Springer (2015).
59. Gupta A. K., Bhattacharya, I, Banerjee, P. S., Mandal J K & Mukherjee A, "DirMove: direction of movement based routing in DTN architecture for postdisaster scenario Wireless Networks, The Journal of Mobile Communication, Computation and Information, ISSN 1022-0038, DOI 10.1007/s11276-015-0994-0(SCI Indexed), June, 2015, link: <http://link.springer.com/article/10.1007/s11276-015-0994-0>
60. Singh, M.M., Singh, A., Mandal, J.K.(2015), "A Snapshot of Black Hole Attack Detection in MANET", *International Journal of Computer Applications (IJCA)*, New York USA, Vol 16, Number 14, April 2015, ISSN: 0975-8887, DOI: 10.5120/20406-2759, pp 23-26, 2015.
61. Mukhopadhyay, S., Mandal, J. K. (2015): Image Denoising based on Sub-image Restoration through Threshold Optimization. *International Journal of Computational Intelligence Studies*, Inderscience Publishers, Geneva, Switzerland, Vol. 4, No. 3/4, pp. 288–312
62. Arindam sarkar, Jyotsna Kumar Mandal(2015), Cryptanalysis of Key Exchange Method in Wireless Communication, *International Journal of Network Security*, Vol.17, No.4, PP.484-493, July 2015
63. Singh, M.M., Singh, A, Mandal, J.K, "Towards Techniques of Detecting Node Replication Attack in Static Wireless Sensor Networks", *International Journal of Information and Computation Technology*, Vol 4, Number 2(2014), ISSN: 0974-2239, pp 153-164, 2014.
64. Dulal Acharjee, Amitava Mukherjee, J K Mandal, Nandini Mukherjee, "Activity Recognition System Using Inbuilt Sensors of Smart Mobile Phone and Minimizing Feature Vectors", *Microsystems Technologies*, Springer(accepted) 2015.
65. Mukhopadhyay, S. and Mandal, J.K. (xxxx) 'Image denoising based on sub-image restoration through threshold optimisation', *Int. J. Computational Intelligence Studies*, Inderscience, Vol. X, No. Y, pp.xxx-xxx.(Accepted).
66. Chakraborty, R, Mandal, J.K. "Secure Encryption Technique (SET): A Private Key Crypto System' in the *International Journal of Multidisciplinary in Cryptology and Information Security (IJMCIS)*", ISSN 2320-2610, Vol.4, No.1 (January – February 2015 issue), pp.10-13, 2015.
67. Mallick, M., Sengupta Madhumita and Mandal, J. K. (20th February, 2015). Authentication through Hough Signature on G-Let D4 Domain (AHSG – D4), *National Conference on Computational Technologies – 2015 (NCCT'15)*, Organized by North Bengal University. Proceedings published with *International Journal of Computer Science and Engineering*. 3(1), 59 - 67, e-ISSN: 2347-2693, 2015.
68. Bandyopadhyay, D, Dasgupta, K Mandal, J. K. Dutta, P, "A novel secure image steganography method based on Chaos theory in spatial domain", *International Journal of Security, Privacy and Trust Management (IJSPTM)*, Vol 3, No 1, February 2014, pp: 11-21, 2014.
69. Rajdeep Chakraborty, Sibendu Biswas and JK Mandal "Modified Rabin Cryptosystem through Advanced Key Distribution System", published in *IOSR Journal of Computer Engineering (IOSR-JCE)*, e-ISSN: 2278-0661, p-ISSN: 2278-8727, accepted &

- published in Volume 16, Issue 2 Ver XII (Mar. - Apr. 2014) issue, PP 01-07, indexed by NASA, Cross Ref, Arxiv.org, Cabell's, Index Copernicus, EBSCO Host, Ulrichs Web, Google Scholar, ANED, Jour Informatics, 2014.
70. Rajdeep Chakraborty, Santanu Basak and JK Mandal "An FPGA Based Crypto Processor through Triangular Modulo Arithmetic Technique (TMAT)", published in International Journal of Multidisciplinary in Cryptology and Information Security (IJMCIS) ISSN 2320 –2610, accepted & published in Volume 3, No.3 (May – June 2014) issue, PP 14-20, indexed by Google scholar, Cite Seer, getCited, .docstoc, Scribd, Ulrich Web, Index Copernicus, Microsoft Academics, New Jour, DOAJ, 2014
 71. Singh, M.M.,Singh, A and Mandal, J.K., Towards Techniques of Detecting Node Replication Attack in Static Wireless Sensor Networks", International Journal of Information and Computation Technology, Vol 4, Number 2(2014), Pp 153-164,ISSN: 0974-2239., 2014
 72. Ghosal, S.K, Mandal J.K, "Color Image Authentication based on Two-Dimensional Separable Discrete Hartley Transform (CIA2D-SDHT)", Association for the Advancement of Modelling and Simulation Techniques in Enterprises (AMSE), France, communicated on line (www.amse-modeling.com under user of jkm), 2014.
 73. Sarkar, A., Mandal, J. K. (2014). Cryptanalysis of Key Exchange method in Wireless Communication (CKE). International Journal of Network Security (IJNS), ISSN 1816 – 3548 [Online]; 1816 – 353X [Print]. (Accepted). Indexed by: SCOPUS, DBLP, SciVerse, Engineering Village, Ei Compendex, Summon by Serial Solutions, SCImago, EBSCO, DOAJ, Google Scholar etc., 2014.
 74. Sarkar, A., Mandal, J. K. (2014). Computational Science guided Soft Computing based Cryptographic Technique using Ant Colony Intelligence for Wireless Communication (ACICT). International Journal of Computational Science and Applications (IJCSA), 4(5), 61-73, DOI: 10.5121/ijcsa.2014.4505, ISSN 2200 – 0011. Indexed by: Ulrichsweb, DOAJ, Scrib, getCITED, Pubget, .docstoc, pub zone, Open J-Gate, CiteSeerx, Google Scholar, cnki.net, etc.,2014.
 75. Sarkar, A, Mandal, J. K, " Soft Computing based Cryptographic Technique using Kohonen's Self Organizing Map Synchronization for Wireless Communication(KSOMSCT), International Journal in Foundations of Computer Science & Technology (IJFCST), Vol.4, No.5,ISSN 1839-7662, Indexed on Google Scholar, EBSCO, DOAJ,SCRIBD,WorldCat, Vol.4, No.5, pp.85-100, (DOI:10.5121/ijfcst.2014.4508) September 2014.
 76. Sarkar, A, Mandal, J. K, "Intelligent Soft Computing based Cryptographic Technique using Chaos Synchronization for Wireless Communication(CSCT), International Journal of Ambient Systems & Applications(IJASA),ISSN 2321-6344 (Print) ISSN 2320-9259 (Online), Indexed on Google Scholar, EBSCO, DOAJ,SCRIBD, WorldCat, Vol.2, No.3, pp.11-20, (DOI:10.5121/ijasa.2014.2302) September 2014.
 77. Nandi, U and Mandal, J. K., "Achieving the Capability of a Dictionary Based Data Compression Technique OLZW and its Variants", International Journal of Electronics Communication and Computer Engineering, Volume 5, Issue 4, ISSN (Online): 2249-071X, ISSN (Print): 2278-4209,pp.921-926, 2014.
 78. Sarkar, A, Mandal, J. K, "Cryptanalysis of Key Exchange method in Wireless Communication (CKE)" (IJNS-2012-10-05-1), International Journal of Network Security.ISSN 1816-353X (Print) ISSN 1816-3548 (Online), Indexed on Scopus, DBLP, SCI, Taiwan(<http://ijns.femto.com.tw/>),(accepted July, 24 2014).
 79. S. K. Ghosal, J. K. Mandal, "Binomial Transform based Fragile Watermarking for Image Authentication" Journal of Information Security and Applications (Ref. No.: ISTR-D-13-00009R2, DOI: 10.1016/j.jisa.2014.07.004), Science Direct, Elsevier, Published on September 27,2014.
 80. Rajdeep Chakraborty, Sibendu Biswas and J K Mandal, "Modified Rabin Cryptosystem through Advanced Key Distribution System", published in IOSR Journal of Computer Engineering (IOSR-JCE), e-ISSN: 2278-0661, p-ISSN: 2278-8727, Volume 16, Issue 2 Ver XII (Mar. - Apr. 2014) issue, PP 01-07, indexed by NASA, Cross Ref, Arxiv.org, Cabell's, Index Copernicus, EBSCO Host, Ulrichs Web, Google Scholar, ANED, Jour Informatics(2014).
 81. Mandal, J K, Sing, M. M., Sing, A, "Towards Techniques of Detecting Node Replication Attack in Static Wireless Sensor Networks", International Journal of Information and Computation Technology, ISSN 0974-2239 Volume 4, Number 2 (2014), pp. 153-164, 2014.
 82. Mandal, J. K.(coauthor) et al, "A Novel Secure Image Steganography Method Based On Chaos Theory In Spatial Domain", International Journal of Security, Privacy and Trust Management (IJSPTM) Vol 3, No 1, February 2014, pp.11-21, DOI:10.5121/ijspmt.2014.3102,link:<http://airccse.org/journal/ijspmt/papers/3114ijspmt02.pdf>, 2014.
 83. Mukhopadhyay, S and Mandal, J. K. , A Fuzzy Switching Median Filter of Impulses in Digital Imagery (FSMF), [Circuits, Systems, and Signal Processing](#), February 2014, DOI:10.1007/s00034-014-9739-z,ISSN: 0278-081X, Springer US,<http://link.springer.com/article/10.1007%2Fs00034-014-9739-z>, 2014.
 84. Singh, M.M., Singh, A, Mandal, J.K(2014), "Towards Techniques of Detecting Node Replication Attack in Static Wireless Sensor Networks", International Journal of Information and Computation Technology, Vol 4, Number 2(2014), ISSN: 0974-2239, pp 153-164, 2014
 85. Parthajit Roy, J. K. Mandal(2014), Performance Evaluation of Some Clustering Indices, [Computational Intelligence in Data Mining - Volume 3](#), Volume 33 of the series [Smart Innovation, Systems and Technologies](#) pp 509-517, Springer, 12 December 2014.
 86. [Madhumita Sengupta and J. K. Mandal, "Hough Signature based Authentication of image through Daubechies Transform technique \(HSADT\)", Computer Society of India, Journal of Computing, Vol. 2, No. 1, pp- 83-89, 2013..](#)
 87. Mandal, J. K., Khamrui, A, "A Genetic Algorithm based Steganography on Color Images (GASCI)" International journal of Signal and Imaging Systems Engineering (IJSISE), Vol.7, No. 1, pp. 59-63,ISSN print: 1748-0698,Indexed in Scopus, DOI: 10.1504/IJSISE.2014.057935,Inderscience Publishers. 2013.
 88. Somnath Mukhopadhyay and J. K. Mandal, "Denosing of digital images through PSO based pixel classification", Central European Journal of Computer Science, Vol. 3, No. 4, pp.158-172,DOI:10.2478/s13537-013-0111-3,Print ISSN 1896-1533 Poland(Springer Publication), Indexed in DBLP,(December, 2013).
 89. Ghoshal, S., Mandal J. K., " A Frazile Watermarking based on Legendre Transform for Color Images(FWLTCI)", Signal & Image Processing:An International Journal(SIPIJ), Vol. 4, No. 4, pp.119-127,DOI:10.5121/sipij.2013.4410, ISSN:0976-710X(o),2229-3922(p), Indexed on EBSCO Host, DOAJ, Open J-Gate, Proquest, Ulrichs, PubZone,New Jour, World Cat, Google Scholar, August, 2013.

90. Ghoshal, S., Mandal J. K., " Binomial Transform based Image Authentication(BTIA)", The International Journal of Multimedia & Its Applications(IJMA), Vol. 5, No. 4, pp.67-74, DOI:10.5121/ijma.2013.5405, ISSN:0975-5578(o),0975-5934(p), Indexed on EBSCO Host, DOAJ, DBLP Vis, Open J-Gate, Proquest, Electronic Journal Library, Ulrichs, PubZone, New Jour, World Cat, August, 2013.
91. Sengupta M, Mandal J. K., " Image Authentication through Z-Transform with Low Energy and Bandwidth (IAZT)", International Journal of Network Security & Applications(IJNSA), ISSN:0974-9330, Indexed on EBSCO Host, DOAJ, Open J-Gate, Electronic Journal Library, Ulrichs, New Jour, (Reference ID 181), (Accepted July 2013).
92. Mondal, U, Mandal J. K., " A Systematic Approach to Authenticate Song Signal Without Distortion of Granularity of Audible Information (ASSDGA) ", International Journal of Multimedia & Its Applications (IJMA), ISSN:0975-5578, Indexed on EBSCO Host, DOAJ, Open J-Gate, Electronic Journal Library, Ulrichs, New Jour, (Reference ID 181), (Accepted July 2013).
93. Sarkar, A, Mandal J. K., " Group Session Key Exchange Multilayer Perceptron based Simulated Annealing guided Automata and Comparison based Metamorphosed Encryption in Wireless Communication (GSMLPSA)", International Journal of Wireless & Mobile Networks (IJWMN), ISSN:0975-3834, Indexed on EBSCO Host, DOAJ, Open J-Gate, Electronic Journal Library, Ulrichs, New Jour, (Reference ID 181), (Accepted July 2013).
94. Mandal J. K., Hasan, K. L., " A Novel Technique to Detect Intrusion in MANET,", International Journal of Network Security & Applications, ISSN:0974-9330, Indexed on EBSCO Host, DOAJ, Open J-Gate, Electronic Journal Library, Ulrichs, New Jour, (Reference ID 177), (Accepted July 2013).
95. Mandal J. K., Hasan, K. L., "Secure Agent based Data Transmission in MANET,", International Journal of Advanced Research in Computer Science, Vol. 4(Issue May-June 2013), ICV=5.47, ISSN:0976-5697, Indexed on EBSCO Host, DOAJ, Open J-Gate, Electronic Journal Library, Ulrichs, New Jour, (Reference ID 4929), 2013.
96. Sengupta, M, Mandal, J. K., "Wavelet based Authentication/Secret Transmission Through Image resizing(WastiR), Signal & Image Processing: An International Journal, ISSN:0976-710X(o), 2229-3922(Print), Indexed on ProQuest, EBSCO, DOAJ, Pubzone, CiteSeer, Google Scholar, Inspec, getcited, March 2013.
97. Sarkar Arindam, Mandal J. K., "Key Swap Over Among Group of Multilayer Perceptrons for Encryption in Wireless Communication(KSOGMLPE)", International Journal of Information TECHNOLOGY, Control and Automation(IJITCA), Vol 3, No.1, January 2013, ISSN: 1839-6682, Indexed by:, [DOAJ](#), [getCITED](#), [Scribd](#), [Google Scholar](#), [CSEB](#), [Pubget](#) [ProQuest](#), pp. 85-100, DOI:10.521/ijitca.2013.3107,2013.
98. Mukhopadhyay, S., Mandal, J.K.: Image Denoising based on Sub-image Restoration through Threshold Optimization. accepted in International Journal of Computational Intelligence Studies (IJCIStudies), Inderscience Publishers, Geneva, Switzerland, 2013
99. Ghosal, S, J. K. Mandal, "A Two Dimensional Discrete Fourier Transform Based Secret Data Embedding For Color Image Authentication (2D-DFTSDECI)", Signal & Image Processing :An International Journal (SIPIJ) Vol.3, No.6, AIRCC, DOI : 10.5121/sipij.2012.3608, December 2012.
100. Ghosal, S, J. K. Mandal, "A Fragile Watermarking Based On Separable Discrete Hartley Transform For Color Image Authentication (FWSHDTCIA)"Signal & Image Processing : An International Journal (SIPIJ) Vol.3, No.6, AIRCC, DOI : 10.5121/sipij.2012.3603, December 2012
101. Sarkar Arindam, Mandal J. K., "Evolutionary Computation Guided Energy Efficient Key Organization in Wireless Communication (ECEEKO)", International Journal of Information and Network Security (IJINS), Vol 2, No.1, 2012, ISSN: 2089-3299, Indexed by: [BASE \(Bielefeld Academic Search Engine\)](#), [Cabell's Directory](#), [Cite Seerx](#), [Computer Science Directory](#), [DOAJ](#), [EBSCO Publishing](#), [EJ](#), [Electronic Journals Library](#), [ELSEVIER](#), [Google Scholar](#), [Index Copernicus](#), [ISSUU](#), [NewJour](#), [OJS PKP](#), [Open J-Gate](#), [ProQuest](#), [Science Central](#), [Scirus](#), [SCOPUS](#), [Socolar Open Access](#), [Ulrich's Periodicals Directory](#), [World Wide Science](#), [WorldCat](#)., 2012
102. Sarkar Arindam, Mandal J. K., "Swarm Intelligence based Faster Public-Key Cryptography in Wireless Communication (SIFPKC)", International Journal of Computer Science & Engineering Technology (IJCSET), Vol. 3 No. 7 July 2012, pp 267-273, ISSN: 2229-3345, Indexed by: DOAJ, INDEX COPERNICUS, Google Scholar, Open J-Gate, Cornell University Library, SCIRUS, 2012
103. Mondal, U, Mandal, J. K. ,(2012) "Enhancing Security of Quality Songs with Embedding Encrypted Hidden Codes in Tolerance Level(SQHTL)",Signal & Image Processing: An International Journal(SIPIJ), AIRCC(Accepted).
104. Mandal, J. K. , Ghoshal, S., "Two Dimensional Discrete Fourier Transform Based Secret Data Embedding in Color Images(2D-DFTSDECI)",Signal & Image Processing:An International Journal(SIPIJ), AIRCC(Accepted).
105. Mondal U, Mandal, J. K , "Authentication of Audio signals through Embedding of Images(AASAD)". Association for the Advancement of Modelling and Simulation Techniques in Enterprises (AMSE), France, communicated on line (www.amse-modeling.com under user of jkm), Dated:05-05-2011, ID 2771, No. 11 512(B)(In press).
106. Nandi, U., Mandal, J. K "Region Based Huffman Compression with Regionwise Multiple Interchange of Codes(RBHM)", Association for the Advancement of Modelling and Simulation Techniques in Enterprises (AMSE), France, communicated on line (www.amse-modeling.com under user of jkm), Dated:14-05-2011, ID 2777, No. 11 514(D)(In press).
107. Mandal, J. K, Mukhopadhyay, S., "A Novel Technique of Filtering High Random valued Impulse Noise and Optimization through Genetic Algorithm(HRVINGA)". Association for the Advancement of Modelling and Simulation Techniques in Enterprises (AMSE), France, communicated on line (www.amse-modeling.com under user of jkm), Dated:07-05-2011, ID 2778(In press).
108. Mandal, J. K. Khamrui, Amrita "An Image Authentication Technique in Frequency Domain using Genetic Algorithm (IAFDGA)", International Journal of Software Engineering & Applications(IJSEA), ISSN : 0975-9018 (Online); 0976-2221(Print), Indexed on DOAJ,EBSCO,INSPEC,ProQuest etc.,DOI:10.5121/ijsea.2012.3504, Vol. 3, No. 5, pp.39-46, Sept. 2012.(<http://airccse.org/journal/ijsea/papers/3512ijsea04.pdf>),2012.
109. Mandal J. K. and Ghosal, S. K. "A Fragile Watermarking based on Separable Discrete Hartley Transform for Color Image Authentication (FWSHDTCIA)", Journal of Signal & Image Processing: An International Journal (SIPIJ), ISSN : 0976-710X (Online); 2229-3922 (print), Extended version of conference (DDPR 2012), "Separable Discrete Hartley Transform based Invisible Watermarking for Color Image Authentication (SDHTIWCIA)", paperID-69, July 13 ~ 15, 2012, Chennai.
110. Mondal Uttam Kr. and Mandal, J. K. "Generating Audio Signal Authentication through Secret Embedded Self Harmonic Component (GASASH)", Journal of IJSPTM, Extended version of conference (CNSA-2012).
111. Nandi, Utpal Mandal, J. K. "Comparative Study And Analysis of Adaptive Region Based Huffman Compression Techniques", International Journal of Information Technology Convergence and Services (IJITCS),ISSN:2231-153X(Online)2231-1939(Print),Extended version of DDPR 2012 Chennai.(Accepted 2012)

112. Mandal J. K. and Das Debashis "Colour Image Steganography Based on Pixel Value Differencing in Spatial Domain", International Journal of Information Sciences and Techniques (IJIST) Vol.2, No.4, July 2012, pp. 83-93, ISSN : 2249-1139, DOI : 10.5121/ijist.2012.2408.(2012).
113. Sengupta, Madhumita, J. K. Mandal, "An Authentication Technique in Frequency Domain through Daubechies Transformation (ATFDD)", International Journal of Advanced Research in Computer Science, Volume 3 No. 4 (July-August 2012), pp. 236-242,(2012).
114. Sarkar, Arindam Mandal, J. K. "Secured Wireless Communication by High-Speed RSA Using Evolutionary Programming based Optimization Computation (HS-RSA-EP)", International Journal of Advanced Research in Computer Science, Volume 3 No. 4 (July-August 2012).
115. Sarkar Arindam and Mandal, J. K., "Energy Efficient Wireless Communication Using Genetic Algorithm Guided Faster Light Weight Digital Signature Algorithm (GADSA)", International Journal Of Advanced Smart Sensor Network Systems (IJASSN), Vol 2, No.3, pp. 9-25, July 2012, DOI: 10.5121/ijassn.2012.2302.
116. Sarkar Arindam and Mandal, J. K. "Multilayer Perceptron Guided Key Generation Through Mutation With Recursive Replacement In Wireless Communication (MLPKG)", International Journal on Ad Hoc Networking Systems (IJANS) Vol. 2, No. 3, pp. 11-28, July 2012, DOI : 10.5121/ijans.2012.2302.
117. Sarkar, Arindam Karforma S.and Mandal, J. K. "Object Oriented Modelling Of IDEA Using GA Based Efficient Key Generation For E-Governance Security (OOMIG)", International Journal of Distributed and Parallel Systems (IJDPS), Vol.3, No.2, pp 171- 183, March 2012, DOI : 10.5121/ijdps.2012.3215 171
118. Dasgupta, K., Mandal, J. K. Mondal, Dutta, P., "Hash based Least Significant Bit Technique for Video Steganography (HLSB)", International Journal of Security, Privacy and Trust Management (IJSPTM), ISSN 2277-5498, AIRCC,2012(accepted)
119. Mandal, J. K.(Co author),et al "Z-Transform based Digital Image Authentication Quantization Index Modulation (Z-DIAQIM)", Advances in Intelligent and Soft Computing, vis CSIA-2012, ISSN:1867-5662, Indexed by ISI Proceeding, DBLP, SCOPUS, EI-Compendex, MetaPress, Springerlink etc., 2012 (accepted)
120. Mondal U. K., Mandal, J. K., "Secret Data Hiding within Tolerance Level of Embedding in Quality Songs(DHTL)", Advances in Intelligent and Soft Computing, vis CSIA-2012, ISSN:1867-5662, Indexed by ISI Proceeding, DBLP, SCOPUS, EI-Compendex, MetaPress, Springerlink etc., 2012 (accepted)
121. Mandal, J. K., Ghoshal, S. K., "A Novel DFT based Information Embedding for Color Image Authentication (DFTIECIA)", Advances in Intelligent and Soft Computing, vis CSIA-2012, ISSN:1867-5662, Indexed by ISI Proceeding, DBLP, SCOPUS, EI-Compendex,MetaPress, Springerlink etc., 2012 (accepted).
122. Mandal, J. K(Co-author) et al, "Image Authentication Technique based on DCT(IATDCT)", Advances in Intelligent and Soft Computing, vis CSIA-2012, ISSN:1867-5662, Indexed by ISI Proceeding, DBLP, SCOPUS, EI-Compendex, MetaPress, Springerlink etc., 2012 (accepted)
123. Mandal, J. K., Pal, Manas, "A Bit Level Session Based Encryption Technique to Enhance Information Security", International Journal on Computer Science and Engineering, Vol. 04, No. 1,ISSN No.: 2229-5631, e-ISSN: 0975-3397, Indexed, January 2012.
124. Mandal, J. K., Pal Manas, "A Generic Session Based Bit Level Cryptographic Technique to Enhance Information Security", International Journal of Computer Science and Network Security, Vol. 11, No. 12, pp. 117-122, Koria, ISSN No.: 1738-7906, Indexed, December 2011
125. Madhumita Sengupta, J. K. Mandal and Nabin Ghoshal, (2011). An authentication technique in frequency domain through wavelet transform (ATFDWT). *Advances in Modelling Signal Processing and Pattern Recognition (AMSE)*, 54(2). 54(1-2). Paper No 11531(1B),2011
126. Sengupta, M and Mandal, J. K., "Transformed IRIS Signature fabricated Authentication in Wavelet based Frequency Domain (TISAWFD)", International Journal of Advanced Research in Computer Science (IJARCS), vol. 2, no. 5, pp. 486-490,http://www.ijarcs.info, ISSN 0976-5697, indexed in: Index Copernicus, DOAJ, Open J Gate, Electronic Journal Library, New Jour, Science central.com, Ulrichs Web, Dayang Journal System, Sept-Oct 2011.
127. Jyotsna Kumar Mandal and Somnath Mukhopadhyay, "PSO based Edge Keeping Suppression of Impulses in Digital Imagery", Advances in Intelligent Soft Computing, vis, INDIA-2012, ISSN: 1867-5662,Indexed by ISI Proceeding, DBLP,COPUS etc.,2012.
128. Mandal, J. K(co-author) et al, "A Steganographic Scheme for Color Image Authentication using Z-Transform (SSCIAZ)",Advances in Intelligent Soft Computing, vis INDIA-2012, ISSN:1867-5662, Indexed by ISI Proceeding, DBLP,COPUS etc.,2012.
129. Parthajit Roy and Jyotsna Kumar Mandal, " A Relaxed ParzenWindow based Multifeatured Fuzzy-GIS Model to Forecast Facility Locations (RPWMFGISFFL)",Advances in Intelligent Soft Computing, vis INDIA-2012, ISSN:1867-5662.Indexed by ISI Proceeding, DBLP,COPUS etc.,2012.
130. U. Mondal, J.K. Mandal, "Fabrication of Message Digest to Authenticate Audio Signals with Alteration of Coefficients of Harmonics in Multi-stages(MDAC), International Journal of Network Security & Its Applications, ISSN:0975-2307(p), (www.aircse.org/journal/sipij/sipij.html), indexed by inspec, scholar, DOAJ, pubget etc.
131. Sengupta, M., Mandal, J. K"An authentication Technique in Frequency Domain through wavelet transformation(ATFDWT)". Association for the Advancement of Modelling and Simulation Techniques in Enterprises (AMSE), France, communicated on line (www.amse-modeling.com under user of jkm), Dated:29-07-2011, ID 2809(In press), 2012.
132. J K Mandal and S. Mukhopadhyay ,"Filtering using all neighbour directional weighted pixels: Optimization using particle swarm optimization",Signal & Image processing: An InternationalJournal (SIPIJ), ISSN: 2229-3922 (www.aircse.org/journal/sipij/sipij.html), indexedbyinspec, scholar, DOAJ, pubget etc.,2011
133. Subhankar Ghatak and J. K. Mandal, "An Efficient (2, 2) Visual Cryptographic Protocol through Meaningful Shares to Transmit Messages/Images (VCPTM)".**International Journal of Computer Theory and Engineering (IJCTE)**, ISSN:1793-8201 (Print Version), Indexed by: EBSCO, ETLibrary, Google Scholar, INSPEC and WorldCat, 2011(In process).
134. Uttam Mondal and J. K. Mandal, "Preservation of IPR of Songs through Embedding Secret Song (IPRSESS)" **International Journal of Computer Theory and Engineering (IJCTE)**, ISSN:1793-8201 (Print Version), Indexed by: EBSCO, ETLibrary, Google Scholar, INSPEC and WorldCat, 2011(In process)

135. J. K. Mandal and Arindam Sarkar, "Neuro Genetic Key based Recursive Modulo-2 Substitution using Mutated Character for Online Wireless Communication (NGKRMSMC)", **International Journal of Computer Theory and Engineering (IJCTE)**, ISSN:1793-8201 (Print Version), Indexed by: EBSCO, ETLibrary, Google Scholar, INSPEC and WorldCat, 2011(In process)
136. J. K. Mandal and Somnath Mukhopadhyay, "GA based Denoising of Impulses (GADI)", *Communications in Computer and Information Science (CCIS)*, ISSN:1865-0929, Vol. 0245, CISIM 2011, pp., Springer, Heidelberg (2011).
137. Uttam Kr. Mondal and J. K. Mandal, "Songs Authentication through Embedding a Self Generated Secure Hidden Signal (SAHS)", *Communications in Computer and Information Science (CCIS)*, ISSN: 1865-0929, Vol. 0245, CISIM 2011, pp., Springer, Heidelberg (2011).
138. J. K. Mandal and Somnath Mukhopadhyay, "A Novel Technique for Removal of Random Valued Impulse Noise Using All Neighbor Directional Weighted Pixels (ANDWP)", *Communications in Computer and Information Science (CCIS)*, ISSN:1865-0929, Vol. 203, PDCTA 2011, pp. 102--111. Springer, Heidelberg (2011).
139. Uttam Kr. Mondal and J. K. Mandal, "A Fourier Transform Based Authentication of Audio Signals through Alternation of Coefficients of Harmonics (FTAT)", *Communications in Computer and Information Science (CCIS)*, ISSN:1865-0929, Vol. 203, PDCTA 2011, pp. 76--85. Springer, Heidelberg (2011).
140. Haldar, P., Mandal, J. K. "Analysis of Change of Landuse Pattern of Large Scale Landuse/Landcover Images". Association for the Advancement of Modelling and Simulation Techniques in Enterprises (AMSE), France, communicated on line (www.amse-modeling.com under user of jkm), Dated:07-05-2011, ID 2775, No. 11 513(1B)(In press).
141. Rajdeep Chakraborty, Sonam Agarwal, Sridipta Misra, Vineet Khemka, Sunit Kr Agarwal and J. K. Mandal, "Triple SV: A Bit Level Symmetric Block-Cipher Having High Avalanche Effect", *International Journal of Advanced Computer Science and Applications(IJACSA)*, ISSN 2156-5570 (online), ISSN 2158-107X (print), Volume 2, Issue 7, pp. 61-68, (HOST, Directory of Open Access Journal (DOAJ), Google Scholar, Journal Seek, Index Copernicus, GEORGETOWN UNIVERSITY LIBRARY, Ulrichsweb, BASE, WorldCat and Powered by Microsoft Research, July 2011.
142. Chakraborty, A, Mandal, J. K., "A File based GIS Anchored Information Retrieval Scheme (FBGISIRS) through Vectorization of Raster Map", *International Journal of Advanced Research in Computer Science (IJARCS)*, ID 1422, vol. 2, no. 4, <http://www.ijarcs.info>, ISSN 0976-5697, indexed in: Index Copernicus, DOAJ, Open J Gate, Electronic Journal Library, New Jour, Science central.com, Ulrichs Web, Dayang Journal System, July_August 2011.
143. Chakraborty, R, Mandal, J. K., "Shuffle_RAT: An FPGA-Baed Iterative Block Cipher", *International Journal of Advanced Research in Computer Science (IJARCS)*, vol. 2, no. 3, pp. 21-24, <http://www.ijarcs.info>, ISSN 0976-5697, indexed in: Index Copernicus, DOAJ, Open J Gate, Electronic Journal Library, New Jour, Science central.com, Ulrichs Web, Dayang Journal System, May-June 2011.
144. Mandal, J. K., Chakraborty, R, "FPGA Based Cipher Design & Implementation of Recursive Oriented Block Arithmetic and Substitution Technique (ROBAST)", *International Journal of Advanced Computer Science and Application(IJACSA)*, ISSN 2156 5570(on), 2158-107X(p) Volume 2, Issue 4, pp. 54-59, April,2011.
145. Mandal, J. K.(co-author) et al, "Gray Value based Adaptive Data Hiding for Image Authentication (GVADHIA)", *Journal of Advanced Research In Computer Science*, ISSN 0976-5697, Volume II, Issue II, pp. 111-115, March-April,2011.
146. Mandal, J. K.(co-author) et al, "Steganographic Technique for High Volume Data Transmission through Colour Image(STHVS DTCI)", *Journal of Advanced Research In Computer Science*, ISSN 0976-5697, Volume II, Issue II, pp. 96-101, March-April, 2011.
147. Mandal, J. K.(co-author) et al, "DFT based Hiding Technique for Colour Image Authentication(DFHTCIA)", *Journal of Advanced Research In Computer Science*, ISSN 0976-5697, Volume II, Issue I, pp. 417-422, Jan-Feb,2011
148. Mandal, J. K., Chakraborty, R, "An RTL Based Design & Implementation of Block Cipher Through Time-Stamp-Keyed-Oriented Encryption Technique(TSK-OET)", *Journal of Advanced Research In Computer Science*, ISSN 0976-5697, Volume II, Issue I, pp. 428-432, Jan-Feb,2011.
149. Mandal, J. K.(co-author) et al, "A Authentication Technique for Image/Legal Document (ATILD)", *International Journal of Signal Processing Systems*, ISSN 1615-5262, Springer Verlag. Communicated 27th, Feb. 2009, accepted for publication, October 2010.
150. Jayanta Kumar Pal, J. K. Mandal and Kousik Dasgupta, "A Novel Visual Cryptographic Technique through Grey Level Inversion (VCTGLI)", *The Second International conference on Networks & Communications (NeCoM-2010)*, Springer Verlag, Chennai, India. AIRCC, pp.124-133,(ISSN 1865-0929), 2010 Vis. *International journal of Network Security & its Applications(IJNSA)*, Vol. 2, No. 4, pp.118-126, October 2010, ISSN: 0974-9330(OL), 0975-2307(p), DOI: 10.5121/ijnsa.2010.2410, 2010.
151. Mandal, J. K. Mandal, U, "Frame Based Symmetric Key Cryptography", *International Journal of Advanced Networking and Applications (IJANA)*, ISSN: 0975-0290(P), Oct, 2010.
152. Mandal, J. K., Nandi, U, "Region Based Huffman(RBH) Compression Technique with Code Interchange, *Malaysian Journal of Computer Science (ISSN 0127-9084)*, Vol. 23, No. 2, pp. 111-120,(ISSN 0127-9084), Oct. 2010.
153. Mandal, J.K., Pal, J. K., "A (2,N) Visual Cryptographic Technique for Banking Applications, *International Journal of network Security & Its Applications(IJNSA)*, Vol. 2, No. 4, pp. 118-127, ISSN -0974-9330(OL),0975-2307(P), Oct, 2010.
154. Mandal, J. K., Som, S., "Cascaded Block Wise Bits Manipulation Technique (CBBMT)", *International Journal of Technology and Engineering Systems(IJTES)*, Vol. 1, No. 1, Jan-June 2010, ISSN No.:0976-269X, pp. 19-27, 2010.
155. Mandal, J.K., et. al., "Secured Data Hiding and Image Authentication in Frequency Domain using Mask (SDHIAFDM)", *International Journal of Innovative Computing, Information & Control*, ISSN 1349-4148,(Accepted) July 2009.
156. Mandal, J. K., Som, S., "Random Byte Value Shift (RBVS) Algorithm", *JIS Management Vista*, Vol. III., No. 1, July-Dec. 2009, ISSN No. 0974-0872, pp. 81-88, 2009.
157. Mandal, J. K., Dutta, S., "Ensuring Information Security Through 123-bit Recursive Substitution of Bits Through Prime-nonprime Detection of Sub-stream (RSBP)", *Journal of Scientific & Industrial Research*, National Institute of Science Communication and Information Research, (CSIR) New Delhi, India, vol. 68, July 2009, pp. 584-591, 2009.
158. Mandal, J. K.(co-author) et al, "A Novel Technique for Authentication of Image/Hiding Large Volume of Data (AI/HIVD)", Association for the Advancement of Modelling & Simulation Techniques in Enterprises (A. M. S. E.), France, 2008, August 2009.
159. Mandal, J. K., Halder, P., and Mal, S., "A GIS anchored Information Retrieval Scheme (GISIRS) based on Vectorization of Raster map", *International Journal of Engineering Research and Industrial Applications*, ISSN: 0974-1518, Vol.-2, No. III, pp. 265-280, 2009.
160. Mandal, J. K., et. al., "A Genetic Function Based Cryptosystem(GFC)", *International Journal of Computer Science & Network Security*, Vol. 09, No. 9, pp. 310-315, Koria, ISSN No.: 1738-7906, September 2009.

161. Mandal, J. K., Halder, P., Mal, S., "Change Detection Based on Remote Sensing Information Model and its Application on Amarabati Land", GIS India- India's first GIS Journal since 1992, ISSN: 0972-5776, Volume 18, No-09,, pp. 3-4, September 2009.
162. Mandal, J. K., et. al., "Region based Huffman (RBH) Compression Technique with Code Interchange", Malaysian Journal of Computer Science(MJCS), Malaysia,(Accepted(Ref. No. MJCS/AI005)) Nov.2009.
163. Mandal, J. K., Halder, P., et al, "An Efficient Technique to Digitize Polygon Segments of a Map/ Image (ETDPS)", International Journal of IT and Knowledge Management, ISSN: 0973-4414, Volume 2, Number 2, pp. 313-316, December 2009.
164. Mandal J. K., Som S., et al, "Power and Secret Key XOR-ing Technique (PSKXT)", International Journal BITM Transaction on EECC, Vol.1 No. 4, December, 2009, ISSN No. : 0974-9527, pp. 528-537.2009.
165. Mandal, J. K, Jha P. K., "Cascaded Recursive Key Rotation and Key Arithmetic of a Session Key(CRKRKA)", International Journal of Intelligent Information Processing, Vol. 2, No. 1, January-June 2008, pp. 9-20, 2008.
166. Mandal, J. K., Dutta, S. "Development & Analysis of a Cipherring Model through Recursive Positional Substitution based on Prime-Nonprime of Cluster", Association for the Advancement of Modeling and Simulation Techniques in Enterprises(AMSE, France), WWW.AMSE-Modeling.org, 2008.
167. Mandal, J. K.(co-author) et al,"A Bit Level Image Authentication / Secrete Message Transmission Technique (BLIA/SMTT)", Association for the Advancement of Modelling & Simulation Technique in Enterprises (A. M. S. E.), AMSE Journal of Signal processing and Pattern Recognition, ISSN 1240-4543, Vil. 51, No. 4, pp 1-13, France May 2008.
168. Mandal, J. K.(co-author) et al, "A Novel Technique for Image Authentication in Frequency Domain using Discrete Fourier Transformation Technique (IAFDDFTT)", Malaysian Journal of Computer Science, ISSN 0127-9094, Vol. 21, No. 1, pp. 24-32, Faculty of Computer Science & Information Technology, University of Malaya, Kuala Lumpur, Malaysia,2008.
169. Mandal, J. K, Halder, P., "A GIS Based Pruning Management System of Tea Garden using Data Base Management System (GISBPMS)", International Journal of Computer Science & Application,, Chikli, Maharastra, India, pp. 9-13, Vol. 2, No. 1, ISSN 0974-1003, 2008.
170. Mandal J.K., Jha,P.K., "A bit level Symmetric Encryption technique through recursive Session Key arithmetic (RSKA) to Enhance the Security of Transmission", Advances in Modeling, Computer Science & Statistics(1D), AMSE Journal, France, 2007.
171. Mandal J.K., Jha, P.K., "Encryption through Cascaded arithmetic operation on pair of bit streams(CAOPB)", Advances in Modeling, Computer Science & Statistics(1D), AMSE Journal, France,2007.
172. Mandal, J, K, Jha, P. K. , " A Bit Level Symmetric Encryption Technique Through Recursive Carry Addition(RCA) of a Session Key", Journal of Institute of Engineering, Pulchak, Kathmandu, Nepal,2007.
173. Jha P. K., S. Shakya, Mandal, J. K., "Encryption through Cascaded Recursive Arithmetic Operation and Key Rotation of a Session Key", "ZERONE", Annual Technical Journal, Dept. of Computer and Electronic Engineering, Volume 4, 2062/2005, pp 51-58, The Institute of Engineering, Pulchowk, Kathmandu, Nepal.
174. Jha P. K., Mandal, J. K., "A bit level Symmetric Encryption technique through recursive transposition operation (RTO) to enhance the Security of Transmission" Journal of Institute of Engineering, Tribhuban University, Pul-Chowk, Kathmandu, Nepal, pp. 106-116, 2006.
175. Mandal J.K., Jha,P.K., "A bit level Symmetric Encryption technique through bitwise operation of blocks(BOB)", NorthBengal University Review(Sc & Tech.),vol.15, No. 1, Darjeeling,India,2006.
176. Mandal J.K., Jha,P.K., "A bit level Symmetric Encryption technique through recursive bitwise arithmetic manipulation(RBAM) to enhance the Security of transmission.", Journal of Association of Computer Engineers Nepal(ACEN), Vol. 1 , No. 2, pp.10-19,Katmandu, Nepal 2006.
177. Mandal J.K., Jha, P. K., "Encryption through cascaded recursive arithmetic operation and key rotation of a Session Key(CRAOKR)",Technical publication of Engineering Association of Nepal, Nepal 2006.
178. Mandal, J. K., et al, "Prime Position Encoding, A Secure Encryption Realized by a Microprocessor Based System", Advances in Modeling, D; Computer Science & Statistics (AMSE), France, 2005.
179. Mandal J.K.,Jha,P.K.,"A bit level Symmetric Encryption technique through bit Transposition Technique (BTT) to enhance the Security of Transmission ",Journal of Purbanchal Engineering College, Kathmandu, pp. 106-116, Nepal, 2005.
180. Mandal, J. K., et al, "Towards Implementation of Security and Storage Efficiency for Geographical Information System", Advances in Modeling, B; Signal Processing and Pattern Recognition (AMSE), Vol. 47, No. 3, pp.1-12, France, 2004.
181. Mandal, J. K., et al, "A 256-bit Recursive Pair Parity Encoder for Encryption", Advances in Modeling, D; Computer Science & Statistics (AMSE), Vol. 9, No. 1, pp. 1-14, France, 2004.
182. Mandal J. K., et al," Microprocessor-Based Bit Level Cryptosystem Through Arithmetic Manipulation of Blocks (AMB)", Journal of Institute of Engineering, Vol. 4, No. 1, pp. 1-7, Nepal, December 2004.
183. Mandal, J. K.,Ghosh, A, "A Comparative Study on Different Methods of Assessing the Effectiveness of Performance Evaluation System in Different Organizations, "ZERONE", Annual Technical Journal, Dept. of Computer and Electronic Engineering, Volume 3,2061/2004, pp 55-60, The Institute of Engineering, Pulchowk, Kathmandu, Nepal, 2004.
184. Mandal, J. K., Mal, S., & Dutta , S., "A Microprocessor Based Generalized Recursive Pair Parity Encoder for Secured Transmission", Journal of Technology, Vol. XXXVII, No. 1-2, pp. 11-20, India, July 2003.
185. Mandal, J. K. , Mal, S., "A Cascaded Technique of Encryption Realized using a Microprocessor Based System, AMSE Journal, France,2002.
186. Mandal, J. K. , Dutta, S., "A Cascaded-Transpose Based Universal Encryption Technique, North Bengal Review (Sc. & Tech),India, 2002.
187. Mandal, J. K., "An Efficient Storage Scheme for Management of Social Database System", Advances in Modeling Measurement & Control, AMSE, Vol. 19, No. 1,pp. 31-43, France, 1999.
188. Mandal, J. K., "Coding through clustering of bits for better utilization of storage space", Advances in Modeling and Analysis, D; Mathematical Tools General Computer Tools, AMSE, Vol.4, No. 1,2,pp. 49-59, France,1999.
189. Mandal, J. K.,Chaudhuri, A., "A Cascaded Image Compression Scheme", N.B.U. Review(Sci & Tech.), India, Vol. 8, No. 2, 1999.
190. Mandal, J. K., Chaudhuri, A.,"A New Universal Data Compression Technique Using Running Difference Method", International Journal of Information and Computing Science(IJICS), Volume 2, No.1, pp. 30-43, India, June 1999.
191. Mandal, J. K,"Efficient Usage of Storage Space for Processing and Storing of Large Volume of Data", N.B.U. Review(Sci. &Tech.), India,Vol.7, No.2 , 1997.
192. Mandal, J. K., "A Gray-like Coding Scheme with Error Correction Capabilities", Advances in Modeling and Analysis, A (AMSE), France, Vol. 22, No.3, 1994.

193. Mandal, J. K., et. al., "Towards identification of local storm using fractal approach", Journal of Indian National Science Academy (INSA) 1990

Publications in International Conferences: 28

1. Santra, D., Mandal, J. K., Basu, S. K., & Goswami, S. (2019). Design Considerations of a Medical Expert System for Differential Diagnosis of Low Back Pain (ESLBP). Global AI Congress 2019, Kolkata to be published in AISC series of Springer. (Best paper award).
2. K. Kundu, P. Halder, J. K. Mandal, "Forest covers classification of Sundarban on the basis of Fuzzy c-means algorithm using satellite images", Global AI Congress 2019, September 12-14, 2019, Springer, at IEM, Saltlake, Kolkata (accepted)
3. R Chatterjee, S Kar, J K Mandal, Managing Tasks in Confidence Based Learning using K-ary Tree, ICL2019, Bangkok, Thailand 24-28, September 2019(accepted), AISC Springer
4. S Kar, J K Mandal, R Chatterjee, An Intelligent Assessment using Variable N-gram Technique, ICL2019, Bangkok, Thailand, 24-28, September 2019(accepted), AISC Springer
5. Gupta, A K, Mandal, J K, Bhattacharya, I, Sensor node assisted DTN for a post-disaster scenario, ICDCN '19 Proceedings of the 20th International Conference on Distributed Computing and Networking, 401-404, ACM Digital Library(2019)
6. Krishan Kundu, Prasun Halder, "Geomorphological Changes in Sundarbans Delta using GIS and Remote Sensing Data". Second International Conference on Computational Intelligence, Communications, and Business Analytics (CICBA-2018) July, 27-28, 2018 Springer at Kalyani Government Engineering College, CCIS 1031, pp. 40-53
7. Arindam Sarkar, Joydeep Dey, Anirban Bhowmik, Jyotsna Kumar Mandal and Sunil Karforma, "Computational Intelligence based Neural Session Key Generation on E-Health System for Ischemic Heart Disease Information Sharing", ICCAIAIT2018, 24-25th March, 2018, AISC Springer, 2018
8. Amit Kumar Gupta, Jyotsna Kumar Mandal and Indrajit Bhattacharya, "Comparative Performance Analysis of DTN Routing Protocols in Multiple Post-Disaster Situations", ICCAIAIT2018, 24-25th March, 2018, AISC Springer(accepted and presented), 2018
9. Sadhu Prasad Kar, Rajeev Chatterjee and Jyotsna Kumar Mandal. A novel automated assessment technique in e-Learning using short answer type questions, First International Conference on Computational Intelligence, Communication and Business Analytics (CICBA 2017), 24-25th March, 2017, Kolkata (CCIS Springer)
10. SomnathMukhopadhyay, TamalDuttaChaudhuri and J. K. Mandal. A Hybrid PSO-Fuzzy based Algorithm for Clustering Indian Stock Market Data, First International Conference on Computational Intelligence, Communication and Business Analytics(CICBA 2017), 24-25th March, 2017, Kolkata(CCIS Springer)
11. RajdeepChakraborty, Runa Seth and Jyotsna Kumar Mandal. High Entropy and Avalanche Based Non-Feistel Cascaded CFB Block Cipher through RSBPNDS and TE, First International Conference on Computational Intelligence, Communication and Business Analytics(CICBA 2017), 24-25th March, 2017, Kolkata(CCIS Springer)
12. Mondal, U and Mandal, J. K., Bicubic Interpolation based Audio Authentication (BIAA), Proceedings of 10th International Conference on Advanced Computing & Communication Technologies(10th ICACCT 2016),18-20 November 2016, Panipat, Haryana, India
13. Singh, M.M. and Mandal, J.K., "Effect of Black Hole Attack on MANET Reliability in DSR Routing Protocol", Proceedings of 10th International Conference on Advanced Computing & Communication Technologies(10th ICACCT 2016),18-20 November 2016, Panipat, Haryana, India(Best Paper Award).
14. Singh, M.M. and Mandal, J.K., "Reliability Analysis of Mobile Ad hoc Network", Proceedings of 7th IEEE International Conference on Computational Intelligence and Communication Networks (CICN-2015), 12-14 December 2015. Jabalpur, India, ISBN: 978-1-5090-0076-0. IEEE Xplore, DOI: 10.1109/CICN.2015.39.
15. Singh, M.M., Singh, A, Mandal, J.K., "Preventing Node Replication Attack in Static Wireless Sensor Networks", IEEE Xplore, DOI:10.1109/ICRITO.2014.7014687, 2014.
16. Singh, M.M., Baruah, M, Mandal, J.K., "Reliability Computation of Mobile Adhoc Network Using Logistic Regression", IEEE Xplore, DOI: 10.1109/WOCN.2014.6923060,2014
17. R Chakraborty, J K Mandal, An FPGA Based Block Cipher through Recursive Positional Substitution on Prime-Nonprime of Cluster (RSPNC), 3rd International Conference on Microelectronics, Circuits and Systems, MICRO 2016, held on July 09th – 10th, 2016, at Science city, Kolkata, West Bengal, India, ISBN: 978-93-80813-45-5, pp 96-101, Cygnus Advertising (India) Pvt. Ltd, Kolkata.
18. R Chakraborty, J K Mandal, Design of FPGA Based ECB Cryptosystem: RPPT Embedded with TB, 3rd International Conference on Microelectronics, Circuits and Systems, MICRO 2016, held on July 09th – 10th, 2016, at Science city, Kolkata, West Bengal, India, ISBN: 978-93-80813-45-5, pp 96-101, Cygnus Advertising (India) Pvt. Ltd, Kolkata.
19. AnirbanChakraborty, J.K. Mandal, Pallavi Roy, PratyushaBhattacharya, Clustering of Noisy Regions (CNR) -A GIS Anchored Technique for Clustering on Raster Map, Proceedings of the Second International Conference on Computer and Communication Technologies, IC3T 2015, Vol 3, Springer International Publishing, ISSN 2194-5357, pp 511-520, July 2015
20. AnirbanChakraborty, J.K. Mandal, Pallavi Roy, Pratyusha Bhattacharya, Compact Coalescence Clustering Algorithm (C3A) - A GIS Anchored Approach of Clustering Discrete Points, Proceedings of the Third International Conference on Information System Design and Intelligent Applications (INDIA 2016), Springer International Publishing, January 2016
21. AnirbanChakraborty, J.K. Mandal, ArnabPatra, JayatraMajumdar, A GIS anchored technique for unmasking enervated mobile signal vigor expanses using Amalgam Clustering Technique, Proceedings Third International Conference on Computing and Systems (ICCS-2016)", ISBN 978-93-85777-13-4, Excel India Publishers, pp 190-195, 21-22 January, 2016.
22. AK Gupta, I Bhattacharya, PS Banerjee, JK Mandal, A Co-operative Approach to Thwart Selfish and Black-Hole Attacks in DTN for Post Disaster Scenario, Emerging Applications of Information Technology (EAIT), 2014 Fourth International Conference of 2014 Dec 19 (pp. 113-118). IEEE.2014.
23. S Pal, I Das, S Majumder, AK Gupta, I Bhattacharya, Embedding an extra layer of data compression scheme for efficient management of big-data, Information Systems Design and Intelligent Applications 2015 (pp. 699-708). Springer India., 2015.

24. J. K. Mandal, KhondekarLutful Hassan(2015),Analysis of Black Hole and Gray Hole Attack in MANET ,based on Simulation through NS2 , AMSE JOURNALS –2015-Series: Advances D; Vol. 20; N° 1; pp 35-46 ,Submitted April 2015; Revised Sept. 21, 2015; Accepted Nov. 30, 2015
25. Utpal Nandi, Jyotsna Kumar Mandal, “Fractal Image Compression with Adaptive Quadtree Partitioning and Lossless Encoding on the Parameters of Affine, Transformations” in 2nd international conference on Information System Design and Intelligent Applications 2015 (INDIA 2015).
26. Utpal Nandi, Jyotsna Kumar Mandal, “Fractal Image Compression with Quadtree Partitioning and a new Fast Classification Strategy” 3rd International Conference on Computer, Communication, Control and Information Technology (C3IT-2015).
27. Utpal Nandi, Jyotsna Kumar Mandal, “Fractal Image Compression With Adaptive Quadtree Partitioning And Archetype Classification” IEEE International Conference on Research in Computational Intelligence and Communication Networks (ICRCIN 2015), Kolkata, West Bengal, India , PP. 56-60.
28. Utpal Nandi, Jyotsna Kumar Mandal, “Wavelet-based image compression using SPIHT and Windowed Huffman coding with limited distinct symbol and its variant” First International Conference on Intelligent Computing and Communication 2016 (ICIC2 2016) , Kalyani, West Bengal, India, 18-19 February, 2016.

Publication in ACM Conferences: 01

1. Ghosh, P, Sadhu, Deep, Mandal, J K, Mandal, J K and Sen, S(2021), RHProphet: An Enhanced Sales Forecasting Model, International Journal for Computers & Their Applications . Dec2021, Vol. 28 Issue 4, p212-221. 10p. <https://doi.org/10.1145/3468081.3471064>

Publication as Lecture Notes in Computer Science Series (LNCS)/AISC etc. by Springer-Verlag: 52

1. R. Chatterjee, J. K. Mandal and S.P. Kar, " A Comprehensive Model for Augmented Confidence Based Learning (ACBL)", ICL2022 – 25th International Conference on Interactive Collaborative Learning, 27–30 September 2022, Hilton Park Vienna, Austria, Springer Nature, pp 863-873, 2022
2. S.P. Kar, R. Chatterjee and J.K. Mandal, Automated Assessment - An Application in Authentic Learning using Bloom’s Taxonomy”, ICL2022 – 25th International Conference on Interactive Collaborative Learning, 27–30 September 2022, Hilton Park Vienna, Austria, Springer Nature, pp 453-462, 2022.
3. B. R. Ghosh, S. Banerjee and J. K. Mandal, ” A Survey on LSB replacement based Statistical Image Steganalysis Techniques” in International Conference on Advances in Data Science and Computing Technologies (ADSC-2022), Organized by Department of Computer Science, Kazi Nazrul University, West Bengal, India)Springer, 23 June 2022 - 24 June 2022
4. Ranjan Dasgupta, Rajeev Chatterjee, J K Mandal, Multi-Controllers based subnet in SDN with BRS, Future of Information and Communications Conference (FICC) 2020, 5-6 March 2020, San Francisco, United States, AISC, Springer
5. Gaurav Gambhir J. K. Mandal, Shared Memory Implementation and Scalability Analysis of Recursive Positional Substitution Based on Prime-Non Prime Encryption Technique, [International Conference on Computational Intelligence, Communications, and Business Analytics](#), CICBA 2018: [Computational Intelligence, Communications, and Business Analytics](#) pp 441-449(2019)
6. Madhuchhanda Dasgupta, Jyotsna Kumar Mandal, Deep Convolutional Neural Network Based Facial Key points Detection, International Conference on Computational Intelligence, Communications, and Business Analytics(CICBA 2018), Communications in Computer and Information Science, vol 1030. Springer, Singapore, CCIS Springer, pp 47-56(2019)
7. Soma Bandyopadhyay, S. S. Thakur, J. K. Mandal, “A Novel approach for Product Prediction using Artificial Neural Networks”, 52nd Annual Convention (CSI 2017), pp. 76, January 19-21, 2018, CCIS Springer 836, Kolkata, India.
8. Radha Krishna Bar, Jyotsna Kumar Mandal And Tanmoy Kanti Halder, “Extending Lifetime Of A Network By Load Sharing In Aodv Routing Protocol, 52nd Annual Convention (CSI 2017), January 19-21, 2018, CCIS Springer 836, Kolkata, India.
9. Arindam Sarkar, Joydeep Dey, Anirban Bhowmik And Sunil Karforma, Jyotsna Kumar Mandal, “Energy Efficient Secured Sharing of Intraoral Gingival Information in Digital Way (EESS-IGI)”, 52nd Annual Convention (CSI 2017), January 19-21, 2018, CCIS Springer 836, Kolkata, India.
10. Utpal Nandi And Jyotsna Kumar Mandal, “A novel hierarchical classification scheme for adaptive quadtree partitioning based fractal image coding, 52nd Annual Convention (CSI 2017), January 19-21, 2018, CCIS Springer 836, Kolkata, India.
11. Arindam Sarkar, Joydeep Dey, Anirban Bhowmik, Jyotsna Kumar Mandal and Sunil Karforma, “Computational Intelligence based Neural Session Key Generation on E-Health System for Ischemic Heart Disease Information Sharing”, ICCAIAIT2018, 24-25th March, 2018, AISC Springer(accepted and presented), 2018
12. Amit Kumar Gupta, Jyotsna Kumar Mandal and Indrajit Bhattacharya, “Comparative Performance Analysis of DTN Routing Protocols in Multiple Post-Disaster Situations”, ICCAIAIT2018, 24-25th March, 2018, AISC Springer(accepted and presented), 2018
13. Sadhu Prasad Kar, Rajeev Chatterjee and Jyotsna Kumar Mandal. A novel automated assessment technique in e-Learning using short answer type questions, First International Conference on Computational Intelligence, Communication and Business Analytics(CICBA 2017), 24-25th March, 2017, Kolkata(CCIS Springer)
14. SomnathMukhopadhyay, TamalDuttaChaudhuri and J. K. Mandal. A Hybrid PSO-Fuzzy based Algorithm for Clustering Indian Stock Market Data, First International Conference on Computational Intelligence, Communication and Business Analytics(CICBA 2017), 24-25th March, 2017, Kolkata(CCIS Springer)

15. Rajdeep Chakraborty, Runa Seth and Jyotsna Kumar Mandal. High Entropy and Avalanche Based Non-Feistel Cascaded CFB Block Cipher through RSBPNDS and TE, First International Conference on Computational Intelligence, Communication and Business Analytics(CICBA 2017), 24-25th March, 2017, Kolkata(CCSIS Springer)
16. Anirban Chakraborty, J.K. Mandal, Pallavi Roy, PratyushaBhattacharya,Clustering of Noisy Regions (CNR) -A GIS Anchored Technique for Clustering on Raster Map,Proceedings of the Second International Conference on Computer and Communication Technologies, IC3T 2015, Vol 3, Springer International Publishing, ISSN 2194-5357, pp 511-520, July 2015
17. Anirban Chakraborty, J.K. Mandal, Pallavi Roy, Pratyusha Bhattacharya, Compact Coalescence Clustering Algorithm (C3A) - A GIS Anchored Approach of Clustering Discrete Points, Proceedings of the Third International Conference on Information System Design and Intelligent Applications (INDIA 2016), Springer International Publishing, January 2016
18. Utpal Nandi, Jyotsna Kumar Mandal, "Wavelet-based image compression using SPIHT and Windowed Huffman coding with limited distinct symbol and its variant" First International Conference on Intelligent Computing and Communication 2016 (ICIC2 2016) , Kalyani, West Bengal, India, 18-19 February, 2016.
19. S Pal, I Das, S Majumder, AK Gupta, I Bhattacharya,Mandal, J K , Embedding an extra layer of data compression scheme for efficient management of big-data, Information Systems Design and Intelligent Applications 2015 (pp. 699-708). Springer India.,2015.
20. Mondal, U and Mandal, J. K., Bicubic Interpolation based Audio Authentication (BIAA), Proceedings of 10th International Conference on Advanced Computing & Communication Technologies(10th ICACCT 2016),18-20 November 2016, Panipat, Haryana, India
21. Singh, M.M. and Mandal, J.K., "Effect of Black Hole Attack on MANET Reliability in DSR Routing Protocol", Proceedings of 10th International Conference on Advanced Computing & Communication Technologies(10th ICACCT 2016),18-20 November 2016, Panipat, Haryana, India(Best Paper Award).
22. Utpal Nandi, Jyotsna Kumar Mandal, "Fractal Image Compression with Adaptive Quadtree Partitioning and Lossless Encoding on the Parameters of Affine, Transformations" in 2nd international conference on Information System Design and Intelligent Applications 2015 (INDIA 2015)
23. Goswami, J.Pal, M , Mandal, J.K., "A Symmetric Key Cryptographic Technique based on Frame Rotation of an even order square Matrix", Proceedings of Second International Conference on Information Systems Design and Intelligent Applications-2015(INDIA-2015), 8-9 January 2015, University of Kalyani, West Bengal, India, Springer AISC 340, DOI:10.1007/978-81-322-2247-7_47,pp. 319-328, 2015
24. Utpal Nandi, Jyotsna Kumar Mandal, "Fractal Image Compression with Quadtree Partitioning and a new Fast Classification Strategy" 3rd International Conference on Computer, Communication, Control and Information Technology (C3IT-2015).
25. Pal, M , Mandal, J.K. and Singh, M. M., "Modified PCT on Variable Cipher Block Chaining Mode", Proceedings of Second International Conference on Information Systems Design and Intelligent Applications-2015(INDIA-2015), 8-9 January 2015, University of Kalyani, West Bengal, India, Springer AISC 340, DOI:10.1007/978-81-322-2247-7_47, 2015
26. Mahapatra Suman, Mandal, J. K. Sengupta, Madhumita. (8th – 9th January, 2015). Authentication in Higher Region of Convergence of Z Transform Domain (AHRocZ). Second International Conference on Information Systems Design and Intelligent Applications - 2015 (INDIA-2015). Springer AISC – 340, 2015
27. Paul, M, Mandal J. K., (12th-14th December, 2014) , "A Cryptographic Scheme through cascaded Session based Symmetric Keys for Ubiquitous Computing", Emerging ICT for Bridging the Future - Proceedings of the 49th Annual Convention of the Computer Society of India (CSI-2014), Springer AISC Series - 337. Vol. 1, 525-532. 978-3-319-13728-5,2014
28. Bandyopadhyay, D, Dasgupta, K, Mandal, JK, Dutta, P, Ojha, V K, Snášel, Václav "A Framework of Secured and Bio-Inspired Image Steganography Using Chaotic Encryption with Genetic Algorithm Optimization (CEGAO)", Springer International Publishing, Proceedings of the Fifth International Conference on Innovations in Bio-Inspired Computing and Applications IBICA 2014, pp. 271-280,2014.
29. Sengupta, Madhumita, Mandal J. K., Khan Sakil Ahamed. (12th-14th December, 2014) , "Image Authentication in Frequency domain through G-Let Dihedral Group D3 (IAFD-D3)", Emerging ICT for Bridging the Future - Proceedings of the 49th Annual Convention of the Computer Society of India (CSI-2014), Springer AISC Series - 337. Vol. 1, 145-152. 978-3-319-13728-5,2 014
30. Sarkar, A., & Mandal, J. K. (2014). Comparative Analysis of Tree parity Machine and Double Hidden Layer Perceptron based Session Key Exchange in Wireless Communication. In Proceedings of the 49th Annual Convention of the Computer Society of India (CSI) and International Conference on Emerging ICT for Bridging the Future, Volume 1, Advances in Intelligent Systems and Computing Volume 337, 2015, pp. 53-61, DOI: 10.1007/978-3-319-13728-5_6, ISBN: 978-3-319-13727-8 [Print], ISBN: 978-3-319-13728-5 [Online], CSI Hyderabad Chapter in Association with JNTU Hyderabad & DRDO, December 12-14 2014, Hyderabad, India: AISC Series Springer. Indexed by: SCOPUS, ISI Proceedings, DBLP, Zentralblatt Math, MetaPress, Springerlink, Google Scholar, etc.,2014.
31. Chakraborty, A and Mandal, J.K., "A GIS Anchored System for Clustering hine and Double Hidden Layer Perceptron based session key exchange in Wireless Communication", Bridging the future- Proceedings of 49th Annual Convention of the Computer Society of India(CSI) Vol1, AISC 337 Springer, Springer, pp.53, December 12-14, 2014
32. Mandal, J.K., Datta, D. and Sarkar A, "Hopfield Network Based Neural Key Generation for Wireless Communication (HNBKNG) International Conference on Frontiers of Intelligent Computing: Theory and Applications (FICTA 2014), AISC 328 series of Springer, Springer, pp.217, September 14-15, 2014.
33. Sengupta,M, Mandal J.K., Sarkar, A and Bhattacharjee T, "KSOFM Network Based Neural Key Generation for Wireless Communication", International Conference on Frontiers of Intelligent Computing: Theory and Applications (FICTA 2014), AISC 328 series of Springer, Springer, pp.207, September 14-15, 2014.
34. Sarkar A, Mandal, J.K. and Pritha Mondal, "Neuro-key Generation Based on HEBB Network for Wireless Communication", International Conference on Frontiers of Intelligent Computing: Theory and Applications (FICTA 2014), AISC 328 series of Springer, Springer, pp.197, September 14-15, 2014.
35. Nandi Utpal and Mandal J. K., "Windowed Huffman Coding with Limited Distinct Symbols by Least Recently Used Symbol Removable", International Conference on Frontiers of Intelligent Computing: Theory and Applications (FICTA 2014), AISC 327 series of Springer, Springer, pp.489, September 14-15, 2014
36. S. Mukhopadhyay, P. Mandal, T. Pal and J. K. Mandal, "Image Clustering based on Different length Particle Swarm Optimization (DPSO)", International Conference on Frontiers of Intelligent Computing: Theory and Applications (FICTA 2014), AISC series of Springer, Springer,pp.711, September 14-15, 2014

37. Uttam Kr. Mondal , J. K. Mandal, "Generating Unique identifying Key for Song Signal using DCT Transform (UIKSSDT)", 48th Annual Convention of Computer Society of India (CSI-2013), Special Session: Computational Intelligence – Tools & Techniques for IT Excellence, Hosted by CSI Visakhapatnam Chapter, In association with Visakhapatnam Steel Plant, 13th -15th Dec, 2013, The proceedings published by AISC series of Springer, pp. 567-575, DOI: 10.1007/978-3-319-03095-1_61, indexed on Scopus, DBLP.
38. Arindam Sarkar, J. K. Mandal, "Complete Binary Tree Architecture based Triple Layer Perceptron Synchronized Group Session Key Exchange and Authentication in Wireless Communication (CBTLP)", 48th Annual Convention of Computer Society of India (CSI-2013), Special Session: Computational Intelligence – Tools & Techniques for IT Excellence, Hosted by CSI Visakhapatnam Chapter, In association with Visakhapatnam Steel Plant, 13th -15th Dec, 2013, The proceedings will be published by AISC series of Springer, pp. 609 – 615, DOI: 10.1007/978-3-319-03095-1_66 , indexed on Scopus, DBLP.
39. Madhumita Sengupta and J. K. Mandal, "Color Image Authentication through Visible Patterns (CAV)", 48th Annual Convention of Computer Society of India (CSI-2013), Special Session: Computational Intelligence – Tools & Techniques for IT Excellence, Hosted by CSI Visakhapatnam Chapter, In association with Visakhapatnam Steel Plant, 13th -15th Dec, 2013, The proceedings will be published by AISC series of Springer, pp. 617-625, DOI: 10.1007/978-3-319-03095-1_67, indexed on Scopus, DBLP.
40. Amrita Khamrui, J. K. Mandal, "A Wavelet Transform based Image Authentication approach using Genetic Algorithm (AWTIAGA)", 48th Annual Convention of Computer Society of India (CSI-2013), Special Session: Computational Intelligence – Tools & Techniques for IT Excellence, Hosted by CSI Visakhapatnam Chapter, In association with Visakhapatnam Steel Plant, 13th -15th Dec, 2013, The proceedings will be published by AISC series of Springer, pp. 251-258, DOI: 10.1007/978-3-319-03107-1_28, indexed on Scopus, DBLP
41. Mandal, J. K., Dutta, S., "Ensuring E-Security Using A Private-Key Cryptographic System Following Recursive Positional Modulo-2 Substitutions", International Conference On Information Technology (Second Asian Applied Computing Conference (AACC2004)), Kathmandu, 29-31st October 2004 Vis., LNCS 3285, Springer-Verlag, pp 324-332, 2004.
42. Mandal J K and Ghosal, S. K. "Separable Discrete Hartley Transform based Invisible Watermarking for Color Image Authentication (SDHTIWCA)", DPPR- 2012, paperID-69, Proceedings of second International Conference on Advances in Computing and Information Technology (ACITY) – Advances in Intelligent Systems and Computing(AISC-177), ISSN No.:2194-5357, Springer, July 13 ~ 15, 2012, pp. 767-776, Volume 2, Chennai, India.
43. Mandal J K and Kanji, Rakesh "Invisible Image Watermarking using Z Transforms (IIWZT)", DPPR- 2012, paperID-74, Proceedings of second International Conference on Advances in Computing and Information Technology (ACITY) – Advances in intelligent systems and computing (AISC-177), ISSN No.:2194-5357, Springer, July 13 ~ 15, 2012, pp. 797-804, Volume 2, Chennai, India.
44. Mandal, J K Khamrui Amrita and Chakraborty, Soham "A Novel Genetic Algorithm based Data Embedding Technique in Frequency Domain using Z Transform (ANGAFDZT)", DPPR- 2012, Advances in Intelligent Systems and Computing, 177, ISSN No.:2194-5357, Springer, pp.885-893, July 13 ~ 15, 2012, Chennai, India(2012).
45. Mondal, Uttam Kumar and Mandal, J K "Secret Image Embedded Authentication of Song Signal through Wavelet Transform (IAWT)", The Fifth International Conference on Network Security & Applications (CNSA-2012), Proceedings of second International Conference on Advances in Computing and Information Technology (ACITY) – Advances in intelligent systems and computing (AISC-176), ISSN No.:2194-5357Springer, July 13 ~ 15, 2012, pp. 199- 208, Volume 1, Chennai, India,
46. Nandi, Utpal Mandal, J K "Adaptive Region Based Huffman Compression Technique with selective code interchanging", The Second International Workshop on Peer-to-Peer Networks and Trust Management (P2PTM-2012), Proceedings of second International Conference on Advances in Computing and Information Technology (ACITY) – Advances in intelligent systems and computing 176, ISSN No.:2194-5357, Springer, July 13 ~ 15, 2012, pp. 739-748, Volume 1, Chennai, India.
47. Mondal Uttam and Mandal, J. K. "Secret Data Hiding within Tolerance Level of Embedding in Quality Songs (DHTEL Delhi, Advances in Intelligent and Soft Computing, Vol. 167 ,ISSN 1867-5662,pp.753-761, Springer, May 25 ~ 27, 2012.
48. J. K. Mandal and S. K. Ghosal, "A Novel DFT Based Information Embedding for Color Image Authentication (DFTIECIA)", Delhi, Advances in Intelligent and Soft Computing, Vol. 167 ,ISSN 1867-5662,pp.763-772, Springer, May 25 ~ 27, 2012.
49. Mandal, J. K(co-author) et al , "Z Transform based Digital Image Authentication using Quantization Index Modulation (Z-DIAQIM)" PaperId-99, 3rd International Conference on Communication Security & Information Assurance (CSIA 2012), Delhi, Advances in Intelligent and Soft Computing, Vol. 167 ,ISSN 1867-5662,pp.745-752, Springer, May 25 ~ 27, 2012.
50. Mandal, J. K(co-author) et al,"Image Authentication Technique based on DCT (IATDCT)", PaperId-231, 3rd International Conference on Communication Security & Information Assurance (CSIA 2012), Delhi, Advances in Intelligent and Soft Computing, Vol. 167 ,ISSN 1867-5662,pp.745-752, Springer, May 25 ~ 27, 2012.
51. Mandal J. K. and Das, Debashis "A Novel Invisible Watermarking based on Cascaded PVD integrated LSB Technique", International Conference on Eco-friendly Computing and Communication Systems (ICECCS-2012), ISSN:1865-0929, ISBN: 978-3-642-32111-5,CCIS 305, DOI : 10.1007/978-3-642-32112-2, Springer Heidelberg, pp. 262-268, 9-11 August 2012, Cochin, Kerala, India, 2012.
52. A. Chakraborty and J. K. Mandal, "A GIS Based approach of Clustering for new Facility Areas in a digitized map", International Conference on Eco-friendly Computing and Communication Systems (ICECCS-2012), ISSN:1865-0929, ISBN: 978-3-642-32111-5,CCIS 305, DOI : 10.1007/978-3-642-32112-2 Springer Heidelberg, pp. 398-405,9-11 August 2012, Cochin, Kerala, India, 2012.

Publication in ELSEVIER International Conferences: 17

1. J. K. Mandal and Parthajit Roy, "A Novel Selective Scale Space Based Fuzzy C-Means Model for Spatial Clustering", Paper ID – 35, 1st International Conference on Computational Intelligence: Modeling, Techniques and Applications (CIMTA- 2013), Sponsored by AICTE, Govt. of India, Technically Sponsored by IEEE Kolkata chapter & Proceedings published with Procedia Technology, Elsevier, vol. 10, pp. 596-603, available digitally on <http://www.sciencedirect.com/science/journal/22120173/10>, 27-28 September, 2013 indexed on SCOPUS, SCI, DBLP etc., 2013.
2. Dr. Pawan Jha and Dr. J.K. Mandal, "SECURING MESSAGE USING RECURSIVE MODULO-2 AND KEY ROTATION OPERATION (RMRO)", Paper ID – 52, 1st International Conference on Computational Intelligence: Modeling, Techniques and Applications (CIMTA- 2013), Sponsored by AICTE, Govt. of India, Technically Sponsored by IEEE Kolkata chapter & Proceedings published with Procedia Technology, Elsevier, vol. 10, pp. 935-941, available digitally on <http://www.sciencedirect.com/science/journal/22120173/10>, 27-28 September, 2013 indexed on SCOPUS, SCI, DBLP etc., 2013.
3. Utpal Nandi and Jyotsna Kumar Mandal, "Modified Compression Techniques Based On Optimality Of LZW Code (MOLZW)", Paper ID – 80, 1st International Conference on Computational Intelligence: Modeling, Techniques and Applications (CIMTA- 2013), Sponsored by AICTE, Govt. of India, Technically Sponsored by IEEE Kolkata chapter & Proceedings published with Procedia Technology, Elsevier Elsevier, vol. 10, pp. 949-956, available digitally on <http://www.sciencedirect.com/science/journal/22120173/10>, 27-28 September, 2013 indexed on SCOPUS, SCI, DBLP etc., 2013.
4. Kousik Dasgupta, J. K. Mandal and Paramartha Dutta, "Optimized Video Steganography using Genetic Algorithm (GA)", Paper ID – 113, 1st International Conference on Computational Intelligence: Modeling, Techniques and Applications (CIMTA- 2013), Sponsored by AICTE, Govt. of India, Technically Sponsored by IEEE Kolkata chapter & Proceedings published with Procedia Technology, Elsevier Elsevier, vol. 10, pp. 131-137, available digitally on <http://www.sciencedirect.com/science/journal/22120173/10>, 27-28 September, 2013 indexed on SCOPUS, SCI, DBLP etc., 2013.
5. Kousik Dasgupta, Brototi Mondal, J. K. Mandal, Paramartha Dutta and Santanu Dam, "A Genetic Algorithm (GA) based Load Balancing Strategy for Cloud Computing", Paper ID – 127, 1st International Conference on Computational Intelligence: Modeling, Techniques and Applications (CIMTA- 2013), Sponsored by AICTE, Govt. of India, Technically Sponsored by IEEE Kolkata chapter & Proceedings published with Procedia Technology, Elsevier, vol. 10, pp. 340-347, available digitally on <http://www.sciencedirect.com/science/journal/22120173/10>, 27-28 September, 2013 indexed on SCOPUS, SCI, DBLP etc., 2013.
6. Amrita Khamrui and J. K. Mandal, "A Genetic Algorithm based Steganography using Discrete Cosine Transformation (GASDCT)", Paper ID – 196, 1st International Conference on Computational Intelligence: Modeling, Techniques and Applications (CIMTA- 2013), Sponsored by AICTE, Govt. of India, Technically Sponsored by IEEE Kolkata chapter & Proceedings published with Procedia Technology, Elsevier, vol. 10, pp. 105-111, available digitally on <http://www.sciencedirect.com/science/journal/22120173/10>, 27-28 September, 2013 indexed on SCOPUS, SCI, DBLP etc., 2013.
7. Somnath Mukhopadhyay and J. K. Mandal, "Wavelet based Denoising of Medical Images using Sub-band Adaptive Thresholding through Genetic Algorithm", Paper ID – 236, 1st International Conference on Computational Intelligence: Modeling, Techniques and Applications (CIMTA- 2013), Sponsored by AICTE, Govt. of India, Technically Sponsored by IEEE Kolkata chapter & Proceedings published with Procedia Technology, Elsevier, vol. 10, pp. 680-689, available digitally on <http://www.sciencedirect.com/science/journal/22120173/10>, 27-28 September, 2013 indexed on SCOPUS, SCI, DBLP etc., 2013.
8. Sudipta Kr Ghosal and J. K. Mandal, "Stirling Transform based Color Image Authentication", Paper ID – 256, 1st International Conference on Computational Intelligence: Modeling, Techniques and Applications (CIMTA- 2013), Sponsored by AICTE, Govt. of India, Technically Sponsored by IEEE Kolkata chapter & Proceedings published with Procedia Technology, Elsevier, vol. 10, pp. 95-104, available digitally on <http://www.sciencedirect.com/science/journal/22120173/10>, 27-28 September, 2013 indexed on SCOPUS, SCI, DBLP etc., 2013.
9. Uttam Kr. Mondal and J. K. Mandal, "Preservation of IPR of Songs through Embedding Secret Song (IPRESS)", Paper ID – 268, 1st International Conference on Computational Intelligence: Modeling, Techniques and Applications (CIMTA- 2013), Sponsored by AICTE, Govt. of India, Technically Sponsored by IEEE Kolkata chapter & Proceedings published with Procedia Technology, Elsevier, vol. 10, pp. 978-986, available digitally on <http://www.sciencedirect.com/science/journal/22120173/10>, 27-28 September, 2013 indexed on SCOPUS, SCI, DBLP etc., 2013.
10. Anirban Chakraborty and J. K. Mandal, "A GIS Anchored system for selection of utility service stations through Hierarchical Clustering", Paper ID – 269, 1st International Conference on Computational Intelligence: Modeling, Techniques and Applications (CIMTA- 2013), Sponsored by AICTE, Govt. of India, Technically Sponsored by IEEE Kolkata Chapter & Proceedings published with Procedia Technology, Elsevier, vol. 10, pp. 762-772, available digitally on <http://www.sciencedirect.com/science/journal/22120173/10>, 27-28 September, 2013 indexed on SCOPUS, SCI, DBLP etc., 2013.
11. Nabarun Chatterjee and J. K. Mandal, "Detection of Blackhole Behaviour using Triangular Encryption in NS2", Paper ID – 270, 1st International Conference on Computational Intelligence: Modeling, Techniques and Applications (CIMTA- 2013), Sponsored by AICTE, Govt. of India, Technically Sponsored by IEEE Kolkata Chapter & Proceedings will be published with Procedia Technology,

- Elsevier, vol.10, pp.524-529, availabledigitally on <http://www.sciencedirect.com/science/journal/22120173/10>, 27-28 September, 2013 indexed on SCOPUS, SCI,DBLP etc.,2013.
12. Arindam Sarkar and J. K. Mandal, "Computational Intelligence based Triple Layer Perceptron Model Coordinated PSO guided Metamorphosed based Application in Cryptographic Technique for Secured Communication (TLPPSO)", Paper ID-304, 1st International Conference on Computational Intelligence: Modeling, Techniques and Applications (CIMTA- 2013), Sponsored by AICTE, Govt. of India, Technically Sponsored by IEEE Kolkata chapter & Proceedings will be published with Procedia Technology, Elsevier, vol.10, pp.433-442, availabledigitally on <http://www.sciencedirect.com/science/journal/22120173/10>, 27-28 September, 2013 indexed on SCOPUS, SCI,DBLP etc.,2013.
 13. Radha Krishna Bar, J. K. Mandal and Moirangthem Marjit Singh, "QoS of MANet using trust based AODV routing protocol through exclusion of black hole attack", Paper ID – 308, 1st International Conference on Computational Intelligence: Modeling, Techniques and Applications (CIMTA- 2013), Sponsored by AICTE, Govt. of India, Technically Sponsored by IEEE Kolkata chapter & Proceedings published with Procedia Technology, Elsevier, vol.10, pp.530-537, availabledigitally on <http://www.sciencedirect.com/science/journal/22120173/10>, 27-28 September, 2013 indexed on SCOPUS, SCI, DBLP etc.,2013.
 14. Madhumita Sengupta and J. K. Mandal, "Authentication through Hough transformation generated Signature on G-Let D3 Domain (AHSG), Paper ID – 329, 1st International Conference on Computational Intelligence: Modeling, Techniques and Applications (CIMTA- 2013), Sponsored by AICTE, Govt. of India, Technically Sponsored by IEEE Kolkata chapter & Proceedings published with Procedia Technology, Elsevier, vol.10, pp.121-130,availabledigitally on <http://www.sciencedirect.com/science/journal/22120173/10>, 27-28 September, 2013 indexed on SCOPUS, SCI,DBLP etc.,2013.
 15. Arghadip Chowdhuri, J. K. Mandal and Arindam Sarkar, "Time Efficient Optimal Tuning through Learning Rules in Unify Computing (TEOTLRUC)", Paper ID – 337, 1st International Conference on Computational Intelligence: Modeling, Techniques and Applications (CIMTA- 2013), Sponsored by AICTE, Govt. of India, Technically Sponsored by IEEE Kolkata chapter & Proceedings published with Procedia Technology,Elsevier, vol.10, pp.474-481,availabledigitally on <http://www.sciencedirect.com/science/journal/22120173/10>, 27-28 September, 2013 indexed on SCOPUS, SCI,DBLP etc.,2013.
 16. Nandi Utpal and Mandal, J K "Windowed Huffman Coding with limited distinct symbols", C3IT 2012, 2nd International Conference on Computer, Communication, Control and Information Technology, Procedia Technology, Elsevier, (February 25 - 26, 2012).
 17. Roy Parthajit and Mandal, J. K. "A Novel Spatial Fuzzy Clustering using Delaunay Triangulation for Large Scale GIS Data (NSFCDT)", 2nd International Conference on Communication, Computing & Security, (ICCCS-2012), Organized by Department of Computer Science & Engineering,National Institute of Technology Rourkela, India, Porcedia Technology, Elsevier, DOI: 10.1016/j.protcy.2012.10.054(PROTCY 553), 6-8 October 2012.

Publication in the IEEE International Conferences: 69

1. A. Mukherjee, R. Chatterjee and J.K. Mandal, "A Proposed Technique for Management of Flow Rules in SDN using Blockchain", ICECCME-2022 - 2nd International Conference on Electrical, Computer, Communications and Mechatronics Engineering, 16–18 November, 2022, Maldives National University (MNU), Male, Maldives. IEEE Explore (in Press).
2. B. R. Ghosh, S. Banerjee, A. Chakraborty, S. Saha and J. K. Mandal, "A Deep Learning Based Image Steganalysis Using Gray Level Co-Occurrence Matrix," 2022 Second International Conference on Advances in Electrical, Computing, Communication and Sustainable Technologies (ICAECT), 2022, pp. 1-8, doi: 10.1109/ICAECT54875.2022.9808013, IEEE Xplore.
3. B. R. Ghosh, S. Banerjee and J. K. Mandal, "Watermark based Image Authentication using Integer Wavelet Transform," 2022 International Conference on Inventive Computation Technologies (ICICT), 2022, pp. 312-319, doi: 10.1109/ICICT54344.2022.9850448, IEEE Xplore.
4. Gambhir,G., Mandal J.K., Multi-core Implementation of Chaotic RGB-LSB Steganography Technique, Proceedings of the 6th International Conference on parallel, Distributed and Grid Computing, PDGC 2020, IEEE, pp.496-500,Solan, India, November 2020.
5. Runa Chatterjee, Rajdeep Chakraborty J K Mandal, Design of Cryptographic model for End-to-End Encryption in FPGA based systems, Proceedings of the Third International Conference on Computing Methodologies and Communication (ICCMC 2019),IEEE Xplore Part Number: CFP19K25-ART; ISBN: 978-1-5386-7808-4
6. Raktim Chakraborty, Jyotsna Kumar Mandal, Sayantan Biswas, "Modelling of 6nm MOS and CMOS", In Proc. "2018 IEEE Electron Device Kolkata Conference (2018 IEEE EDKCON)",The Pride Hotel, Kolkata,India, pp-78,24th -25th November 2018.
7. Kar, S. P. and Mandal, J. K., "A Comprehension Based Intelligent Assessment Architecture", IEEE Teaching, Assessment, and Learning in Engineering Conference (TALE 2017) to be held in Bangkok, THAILAND, during 7th – 9th December 2017 at King Mongkut's University of Technology, North Bangkok.
8. Chatterjee Rajeev, Mandal, J. K. going " Tow dimensional Assessment Technique in CBL" IEEE Teaching, Assessment, and Learning in Engineering Conference (TALE 2017) to be held in Bangkok, THAILAND, during 7th – 9th December 2017 at King Mongkut's University of Technology, North Bangkok
9. Chatterjee Rajeev, Mandal, J. K., "A Novel Learning Object Framework for Confidence Based Learning ". IEEE and IFIP International Conference ICSCCT 2016, , Tashkent University of Information Technologies (TUIT), Tashkent Uzbekistan, 2-4th November 2016 .
10. Utpal Nandi, Jyotsna Kumar Mandal, "Fractal Image Compression With Adaptive Quadtree Partitioning And Archetype Classification" IEEE International Conference on Research in Computational Intelligence and Communication Networks (ICRCIN 2015), Kolkata, West Bengal, India , PP. 56-60.
11. Singh, M.M. and Mandal, J.K., "Reliability Analysis of Mobile Ad hoc Network", Proceedings of 7th IEEE International Conference on Computational Intelligence and Communication Networks (CICN-2015), 12-14 December 2015. Jabalpur, India, , ISBN: 978-1-5090-0076-0. IEEE Xplore, DOI: 10.1109/CICN.2015.39.
12. Singh, M.M., Singh, A, Mandal, J.K., "Preventing Node Replication Attack in Static Wireless Sensor Networks", IEEE Xplore,DOI:10.1109/ICRITO.2014.7014687, 2014.

13. Singh, M.M., Baruah, M, Mandal, J.K, “Reliability Computation of Mobile Adhoc Network Using Logistic Regression”, IEEE Xplore, DOI: 10.1109/WOCN.2014.6923060,2014
14. Singh M.M, Singh A. and Mandal , J.K., Preventing Node Replication Attack in Static Wireless Sensor Networks”, Proceedings of 2014 IEEE 3rd International Conference ICRITO-2014, 8-10 October 2014, Amity University Uttar Pradesh Noida India.[IEEE Xplore.DOI:10.1109/ICRITO.2014.7014687]
15. Singh M.M, Baruah, M.and.Mandal, J.K , “Reliability Computation of Mobile Adhoc Network Using Logistic Regression”, Proceedings of IEEE and IFIP 11th International Conference WOCN2014, 11-13 September 2014, K.L.University Vijayawada India.[IEEE Xplore, DOI: 10.1109/WOCN.2014.6923060]
16. Gupta, A. K., Bhattacharya, I., Banerjee, P. S., Mandal,J. K., “A Co-operative Approach to Thwart Selfish and Black-hole Attacks in DTN for Post Disaster Scenario”, in Proc. EAIT-2014 (IEEE Xplore), ISI, Kolkata, DOI , pp-, Dec 20-21, 2014
17. Pragati Mandal, J. K. Mandal, T Pal, “Adaptive Partial Image Encryption Technique based on Chaotic Map”, 2014 Fourth International Conference on Emerging Applications of Information Technology (EAIT 2014), December 19-21, ISI, Kolkata, India, 2014
18. Sahil Sareen, J. K. Mandal, Tandra Pal, “Image Encryption using Genetic Algorithms”, IEEE Seventh International Joint Conference on Computational Sciences and Optimization (CSO 2014), July 4-6, 2014,Beijing, China,2014
19. Mandal, J. K. Nandi, U, “Fractal Image Compression By Using Loss-Less Encoding On The Parameters Of Affine Transforms”, IEEE International Conference ACES-14, HOOGHLY, WEST BENGAL, INDIA(2014)(accepted).
20. Mandal, J. K. Nandi, U, “Fractal Image Compression using Fast Context Independent HV partitioning Scheme and MRBH, MRBHM coding”, IEEE International Conference ACES-14, HOOGHLY, WEST BENGAL, INDIA(2014).
21. Sarkar, A., Changder, S and mandal, J. K., “A Threshold based Directional Weighted Median Filter for Removal of Random Impulses in Thermal Images”, IEEE, 2nd International Conference on Business and Information management(ICBIM)- 2014, NIT Durgapur, Doi:978-1-4799-3264-1/14/\$31.00@2014 IEEE, pp. , NTU Singapore.
22. Madhumita Sengupta, J. K. Mandal and Jimson Mathew, “G-Let based Authentication/Secret Message Transmission (GASMT)”, IEEE, 4th International Symposium on Electronic System Design, ISED- 2013, 10-12 Dec. 2013, NTU Singapore, pp 186 – 190, ISBN - 978-0-7695-5143-2, DOI : 10.1109/ISED.2013.44, 2013.
23. Arindam Sarkar, J. K. Mandal and Priyadarsan Patra, “Double Layer Perceptron Synchronized Computational Intelligence guided Fractal Triangle based Cryptographic Technique for Secured Communication (DLPFT)”, Paper ID – 57, IEEE, 4th International Symposium on Electronic System Design ISED- 2013, NTU Singapore,2013.
24. Mandal, J. K., Chowdhuri, Arghyadip Sarkar, A., “Encryption Technique based on Neural Session Key (ETNSK)”, IEEE Technical Co-Sponsored International Conference International conference, ICCS - 2013, Department of Computer Science Burdwan University, Burdwan, during 21-23, September,2013
25. Chakraborty, A, Mandal, J. K., Chandrabanshi, S. B and Sarkar, S, “A GIS Anchored system for selection of utility service stations using k-means method of Clustering”, IEEE Technical Co-Sponsored International Conference International conference, ICCS - 2013, Department of Computer Science Burdwan University, Burdwan, during 21-23, September,2013
26. Nandi, U, Mandal, J. K., “A Compression Technique Based On Optimality Of LZW Code (OLZW)”, IEEE 3rd International Conference on Computer and Communication Technology (ICCT-2012), to be held at MotiLal Nehru National Institute of Technology, Allahabad during 23-25 November 2012.
27. Sengupta. M, Mandal. J. K, “Authentication of images through non convoluted DCT”, IEEE 1st International Conference on Communication and Industrial Applications (ICCIA-2011), IEEE Conference ID:19700, 26th – 28th December, 2011, Science City, Kolkata,(Paper Id- 87), 2011.
28. Ghatak, S, Mandal. J. K, “Constant Aspect Ratio based (2, 2) Visual Cryptography through Meaningful Shares (CARVCMSS)”, IEEE 1st International Conference on Communication and Industrial Applications(ICCIA-2011), IEEE Conference ID:19700, 26th – 28th December, 2011, Science City, Kolkata. (Paper Id- 92), 2011.
29. Mondal, U., M, Mandal. J. K, “Generation and Fabrication of authenticated song signal through preserving balance ratio of song’s components”, IEEE 1st International Conference on Communication and Industrial Applications(ICCIA-2011), IEEE Conference ID:19700, 26th – 28th December, 2011, Science City, Kolkata (Paper Id- 96),2011.
30. Khamrui, A., Mandal. J. K, “A Genetic Algorithm based Steganography in Frequency Domain (GASFD)”, IEEE 1st International Conference on Communication and Industrial Applications (ICCIA-2011), IEEE Conference ID:19700, 26th – 28th December, 2011, Science City, Kolkata (Paper Id- 88), 2011.
31. Mandal. J. K, Sarkar A, “An Adaptive Genetic Key based Neural Encryption for Online Wireless Communication (AGKNE)”, IEEE International Conference on Recent Trends in Information System(ReTIS 2011)”, Jadavpur University, Kolkata, India), dated: 21st-23rd December,2011 (Paper Id 66)
32. Mandal. J. K, Mukhopadhyay .S, “Edge Preserving Restoration of Random Valued Impulse Noises (EPRRVIN), IEEE International Conference on Recent Trends in Information System(ReTIS 2011)”, Jadavpur University, Kolkata, India), dated: 21st -23rd December,2011 (Paper Id 60)
33. Mandal. J. K, Mukhopadhyay .S, “A Novel Variable Mask Median Filter for Removal of Random Valued Impulses in Digital Images(VMM)”, International Symposium on Electronic System Design (ISED) 2011 (19-21 December 2011, Kochi, India), 2011. (Paper Id 20)
34. Mondal. U. K, Mandal J. K, “A Message Embedded Authentication of Songs to Verify Intellectual Property Right (MEAS)”, International Symposium on Electronic System Design (ISED) 2011 (19-21 December 2011, Kochi, India), 2011. (Paper Id 39).
35. Mandal .J .K, Ghatak .S, “A Novel Technique for Secret Communication through Optimal Shares using Visual Cryptography (SCOSVC)”, International Symposium on Electronic System Design (ISED) 2011 (19-21 December 2011, Kochi, India), dated: - 15th June, 2011. (Paper Id 40)
36. Sengupta .M, Mandal. J. K, “Image Authentication using Hough Transform generated Self Signature in DCT based Frequency Domain (IAHTSSDCT)”, International Symposium on Electronic System Design (ISED) 2011 (19-21 December 2011, Kochi, India),2011. (Paper Id- 67).
37. Mandal . J. K, Khamrui . A, “A Data- Hiding Scheme for Digital Image using Pixel Value Differencing (DHPVD)”, International Symposium on Electronic System Design (ISED) 2011 (19-21 December 2011, Kochi, India),2011. (Paper Id 70)(accepted)
38. Roy .P, Mandal .J. K, “A Novel Fuzzy-GIS Model based on Delaunay Triangulation to Forecast Facility Locations (FGISFFL)”, International Symposium on Electronic System Design (ISED) 2011 (19-21 December 2011, Kochi, India), June, 2011. (Paper Id 72) (accepted)

39. Mandal, J. K.(co-author) et al, "A Steganographic Scheme for Colour Image Authentication (SSCIA)" IEEE International Conference on Recent Trends in Information Technology (ICRTIT 2011)", IEEE Catalog: CFP1122P-CDR, ISBN: 978-1-4577-0589-2, June 3-5, 2011, PP. 826-831, Madras Institute of Technology, Anna University, Chennai, India, Paper ID-303,2011
40. Mandal, J. K., Madhumita Sengupta, "Self Authentication of color images through Discrete Cosine Transformation (SADCT)", IEEE International Conference on Recent Trends in Information Technology (ICRTIT 2011), IEEE International Conference on Recent Trends in Information Technology (ICRTIT 2011)", IEEE Catalog: CFP1122P-CDR, ISBN: 978-1-4577-0589-2, June 3-5, 2011, PP. 832-836, Madras Institute of Technology, Anna University, Chennai, India, Paper ID-305,2011
41. Mandal, J. K., Uttam Mondal, " Song Authentication Technique through Concealment of Secret Song (SATCon)", IEEE International Conference on Recent Trends in Information Technology (ICRTIT 2011 IEEE International Conference on Recent Trends in Information Technology (ICRTIT 2011)", IEEE Catalog: CFP1122P-CDR, ISBN: 978-1-4577-0589-2, June 3-5, 2011, PP. 145-150, Madras Institute of Technology, Anna University, Chennai, India, Paper ID-306,2011
42. Mandal, J. K., Arindam Sarkar , "An Adaptive Neural Network Guided Secret Key based Encryption through Recursive Positional Modulo-2 Substitution for Online Wireless Communication", International Conference on Recent Trends in Information Technology (ICRTIT 2011), IEEE International Conference on Recent Trends in Information Technology (ICRTIT 2011)", IEEE Catalog: CFP1122P-CDR, ISBN: 978-1-4577-0589-2, June 3-5, 2011, PP. 107-112, Madras Institute of Technology, Anna University, Chennai, India, Paper ID-307,2011
43. Mandal, J. K., Subhankar Ghatak, "Secret Image / Message Transmission through Meaningful Shares using (2, 2) Visual Cryptography (SITMSVC) International Conference on Recent Trends in Information Technology (ICRTIT 2011), IEEE International Conference on Recent Trends in Information Technology (ICRTIT 2011)", IEEE Catalog: CFP1122P-CDR, ISBN: 978-1-4577-0589-2, June 3-5, 2011, pp. 263-268, Madras Institute of Technology, Anna University, Chennai, India, Paper ID-474,2011
44. J. K. Mandal(co-author) et al, "Discrete Fourier Transform based Multimedia Colour Image Authentication for Wireless Communication (DFTMCIAWC)", ID: 187, Special Session: Security Protection Mechanism in Wireless Sensor Networks, IEEE Second International Conference on Wireless Communication & Vehicular Technology, Information Theory and Aerospace & Electronic System Technology (WVITAE2011), Chennai, India, 28 Feb. -3rd March, River Publishers, ISBN:978-87-92329-61-5, 2011.
45. J. K. Mandal, A. Sarkar, "An Adaptive Neural Network Guided Random Block Length based Cryptosystem for Online Wireless Communication (ANNRBLC)", ID: 186, Special Session: Security Protection Mechanism in Wireless Sensor Networks, IEEE Second International Conference on Wireless Communication & Vehicular Technology, Information Theory and Aerospace & Electronic System Technology (WVITAE2011), Chennai, India, 28 Feb. -3rd March, River Publishers, ISBN:978-87-92329-61-5, 2011.
46. J. K. Mandal, Aparna Sarkar, Paper No: 85 Title: "A Modified Weighted Based Filter for Removal of Random Impulse Noise (MWB)", IEEE Second International Conference on Emerging Applications of Information Technology (EAIT 2011).
47. J. K. Mandal, Madhumita Sengupta, Paper No. : 51, Title : "Steganographic Technique Based on Minimum Deviation of Fidelity (STMDf)", IEEE Second International Conference on Emerging Applications of Information Technology (EAIT 2011).
48. J. K. Mandal(co-author) et al, "Controlled Data Hiding Technique for Color Image Authentication in Frequency Domain (CDHTCIAFD).", IEEE Second International Conference on Emerging Applications of Information Technology (EAIT 2011).
49. Mandal, J. K., et al., Paper No. : 72, Title: "A Three Dimensional Bi-directional Self-Organizing Neural Network (3-DBDSONN) Architecture for Three Dimensional Object Extraction from a Noisy Perspective". IEEE Second International Conference on Emerging Applications of Information Technology (EAIT 2011).
50. J. K. Mandal, Madhumita Sengupta, "Authentication/Secret Message Transformation Through Wavelet Transform based Subband Image Coding (WTSIC)", International Symposium on Electronic System Design 2010, pp 225-229, ISBN 978-0-7695-4294-2, Bhubaneswar, India, DOI 10.1109/ISED.2010.50.,2010.
51. J.K. Mandal, Aparna Sarkar, "A Novel Modified Directional Weighted Median Based Filter for Removal of Random Impulse Noise (MDWMF)", International Symposium on Electronic System Design 2010, pp 230-234, ISBN 978-0-7695-4294-2, Bhubaneswar, India, DOI 10.1109/ISED.2010.51,2010.
52. Prasun Halder , J.K.Mandal, Satadal Mal, "A GIS Based Tool for Change Detection of Large Scale Landuse Map", International Symposium on Electronic System Design 2010, pp 241- 245, ISBN 978-0-7695-4294-2, Bhubaneswar, India, DOI 10.1109/ISED.2010.53,2010.
53. Uttam Kr. Mondal, J.K. Mandal, "A Novel Technique to Protect Piracy of Quality Songs through Amplitude Manipulation (PPAM)", International Symposium on Electronic System Design 2010, pp 246-250, ISBN 978-0-7695-4294-2, Bhubaneswar, India, DOI 10.1109/ISED.2010.54,2010.
54. Mandal, J. K., Pal, J. K."A Novel Block Cipher Technique Using Binary Field Arithmetic Based Substitution (BCTBFABS)", IEEE Int. Conference on Computing Communication and Networking Technologies (ICCCNT 2010), Chettrinad Engg. College, Karur, Tamilnadu,(ISBN 978-1-4244-6591-0,DOI,10.11091/ICCCNT,2010,5591595), pp.1-8, 29-31st July, 2010.
55. Mandal, J. K.(co-author) et al, "Image Authentication by Hiding Large Volume of Data and Secure Message Transmission Technique using Mask (IAHLVDSMTTM)", Proceedings of IEEE International Advanced Computing Conference IACC'09, ISBN: 978-981-08-2465-5, March 6-7th, Thapar University, Patiala, India, pp. 3177-3188, 2009.
56. Mandal, J. K., Halder, P. et al., "A Decision Support System Based on 2D & 3D Graphical Representation on Segments of Remote Sensing Image / Local Map", Proceedings of IEEE International Advanced Computing Conference IACC'09, ISBN: 978-981-08-2465-5, March 6-7th, Thapar University, Patiala, India, pp. 2172-2176, 2009.
57. Mandal, J. K., Mandal, S. N. et al., "Octant Based Cryptography – An Innovative Approach to Symmetric Key Cryptography", Proceedings of IEEE International Advanced Computing Conference IACC'09, ISBN: 978-981-08-2465-5, March 6-7th, Thapar University, Patiala, India, pp. 3484-3489, 2009.
58. Mandal, J. K., Das, M. et al., "Fibonacci Based Position Substitution (FBPS) Encoder for Secured Message Transmission", Proceedings of IEEE International Advanced Computing Conference IACC'09, ISBN: 978-981-08-2465-5, March 6-7th, Thapar University, Patiala, India, pp. 2588-2594, 2009.
59. Mandal, J. K.(co-author) et al, "A Framework for Block Based Image Authentication (FBIA), Proc. IEEE Fourth International Conference on Industrial and Informational Systems(ICIS 2009), ISBN – 978-1-4244-4837-1, 2009, December. 28-31, 2009, University of Peradeniya, Srilanka, pp. 1-6, 2009.
60. Mandal, J. K., Pal, J., "A Random Blocklength Based Cryptosystem through Multiple cascaded Permutation-combinations and Chaining of Blocks(FBIA), Proc. IEEE Fourth International Conference on Industrial and Informational Systems(ICIS 2009), ISBN – 978-1-4244-4837-1, 2009, December. 28-31, 2009, University of Peradeniya, Srilanka, pp. 25-30, 2009.

61. Rajdeep Chakraborty and J.K. Mandal, "A Microprocessor-based Stream Cipher through Stream Parity Technique (SPT)", published in First International Conference on Computer, Communication, Control and Information Technology (C3IT 2009), held on 06-07 February, 2009 at Hoogly, West Bengal, INDIA, organized and sponsored by Academy of Technology (AOT), IEEE Leos Calcutta Chapter, IEEE EDS Calcutta Chapter, All India Council for Technical Education (AICTE), Indian Space Research Organization (ISRO), and CSIR, and published by MACMILLAN PUBLISHERS INDIA LTD Advanced Research Series, New Delhi, India, ISBN 10: 0230-63759-0, ISBN 13: 978-0230-63759-7, pp 417-423, 2009.
62. Mandal, J. K.(co-author) et al. "Masking Based Data Hiding and Image Authentication Technique(MDHIAT), Proc. IEEE International Conference on Advanced Computing and Communications(ADCOM), ISSN – 978-1-4244-2963-9, 2008, Dec. 14-17, 2008, Chennai, India, pp. 119-122, 2008.
63. Mandal, J. K., Pal, J. "Composite transposition Substitution Chaining based Cipher Technique", Proc. International Conference on Advanced Computing and Communications(ADCOM), ISSN – 978-1-4244-2963-9, 2008, Dec. 14-17, 2008, Chennai, India, pp.433-439, 2008.
64. Mandal, J. K., Jha, P. K., "Encryption Through Cascaded Bitwise and Carry Addition on Blocks(CRBOCAB) of a Session Key, IEEE International Conference on Advances in Computer Vision and Information Technology, CST, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (MS), 28th -30th November 2007.
65. Mandal, J. K., Das, S., Moitra, A., " A GIS Based Database Oriented Vectorization of Tea Garden Image for Decision-Making", IEEE International Conference on Advances in Computer Vision and Information Technology, CST, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (MS), 28th -30th Nov. 2007.
66. Mandal, J. K., Chakraborty, R., " **A Microprocessor-based Block Cipher through Rotational Addition Technique (RAT)**", Proceedings of 9th International Conference of IEEE on Information Technology, OTIS,ITER,NJIT SATYAM COMPUTER & IEEE, (ICIT 2006), published by IEEE Computer Society Conference Publishing Services, ISBN-10: 0-7695-2635- 7/06, ISBN-13: 978-0-7695-2635-5,pp 155-159 ,December 18-21, 2006, Bhubaneswar, India, 2006.
67. Mandal, J. K., Jha, P. K., "**Encryption Through Recursive Carry Addition and Key Rotation(CRCAKR) Of a Session Key**", Proceedings of 9th International Conference of IEEE on Information Technology, CIT2006, December 18-21, Bhubaneswar, India, pp. 176-177, 2006.
68. Mandal, J. K., Kumar, A., "A Compression Technique Based on Optimality of Huffman Tree (OHT)", Proceedings of 12th International Conference of IEEE on Advanced Computing and Communications - ADCOM-2004, published by Allied Publishers Pvt. Limited, Mumbai, India, ISBN 81-7764-717-2, pp. 589-595,December 15-18, Ahmedabad, India, 2004.
69. Mandal, J. K., Sinha, S., Chakraborty, R., " **A Microprocessor-based Block Cipher through Overlapped Modulo Arithmetic Technique (OMAT)**", Proceedings of 12th International Conference of IEEE on Advanced Computing and Communications - ADCOM-2004, ACS,CSI & IEEE, published by Allied Publishers Pvt. Limited, Mumbai, India, ISBN 81-7764-717-2, pp 276-280, December 15-18, Ahmedabad, India,2004

Publication in the International Conferences in India: 53

1. Soma Bandyopadhyay, S. S. Thakur, J. K. Mandal (2019) Implementation of Real Time Virtual Dressing Room and its sustainability: In Indian Subcontinent: In Proc of International Conference on Emerging Technologies for Sustainable Development (ICETSD'19) pp. 362-365 held at GCELT, Kolkata during 5th to 6th March,2019 organised by GCELT, Kolkata.
2. Soma Bandyopadhyay, S. S. Thakur, J. K. Mandal, "Product Recommendation for E-Commerce Data using Association Rule and Apriori Algorithm", International Conference on Modelling and Simulation (MS-17), pp. 66, November 4-5, 2017, Kolkata, India
3. AnirbanChakraborty, J.K. Mandal, ArnabPatra, JayatraMajumdar, A GIS anchored technique for unmasking enervated mobile signal vigor expanses using Amalgam Clustering Technique, Proceedings Third International Conference on Computing and Systems (ICCS-2016)", ISBN 978-93-85777-13-4, Excel India Publishers, pp 190-195, 21-22 January, 2016
4. R Chakraborty, J K Mandal, An FPGA Based Block Cipher through Recursive Positional Substitution on Prime-Nonprime of Cluster (RPSNPC), 3rd International Conference on Microelectronics, Circuits and Systems, MICRO 2016, held on July 09th – 10th, 2016, at Science city, Kolkata, West Bengal, India,ISBN: 978-93-80813-45-5,pp 96-101, Cygnus Advertising (India) Pvt. Ltd, Kolkata.
5. R Chakraborty, J K Mandal, Design of FPGA Based ECB Cryptosystem: RPPT Embedded with TB, 3rd International Conference on Microelectronics, Circuits and Systems, MICRO 2016, held on July 09th – 10th, 2016, at Science city, Kolkata, West Bengal, India,ISBN: 978-93-80813-45-5,pp 96-101, Cygnus Advertising (India) Pvt. Ltd, Kolkata.
6. Paul, M., Mandal, J.K.,"A Novel Generic Session based Bit Level Cryptographic Technique based on Magic Square Concept, International Conference on Global Innovations in Technology and Science(ICGITS2013), Saintgits College of Engineering, Kottayam, Kerala, 4-6th April, 2013.
7. Paul, M., Mandal, J.K.,"A Novel Symmetric Key Cryptographic Technique at Bit Level Based on Spiral Matrix Concept, International Conference on IT, Electronics and Communications(ICITEC-2013),(ISBN:978-93-82359-35-7), Bangalore, 30-31 March,2013
8. Mandal, J. K., Chakraborty, A., "A GIS Anchored Technique to obtain Optimal Path through Minimal Alteration of Land type",CSIT-2013, Proceedings of Third International Conference on Computer Science & Information Technology AIRCC Computer Science Proceedings, ISSN No.2231-5403, DOI:10.5121/csit.2013.3622, Feb.18-20, 2013, pp.273-279, Bangalore, India., 2013
9. Nandi, U., Mandal, J. K.,"Fractal Image Compression with Adaptive Quadratic Partitioning",CSIT- 2013, Proceedings of Third International Conference on Computer Science & Information Technology AIRCC Computer Science Proceedings, ISSN No.2231-5403, DOI:10.5121/csit.2013.3622, Feb.18-20, 2013, pp.289-296, Bangalore, India, 2013
10. Mandal, J. K., Ghosal S. K., "A Fragile Watermarking based on Binomial Transform in Color Images",CSIT- 2013, Proceedings of Third International Conference on Computer Science & Information Technology AIRCC Computer Science Proceedings, ISSN No.2231-5403, DOI:10.5121/csit.2013.3622, Feb.18-20, 2013, pp.281-288, Bangalore, India, 2013
11. Mandal, J. K., Ghosal S. K., "Legendre Transformation based Color Image Authentication(LTCIA)",CSIT- 2013, Proceedings of Third International Conference on Computer Science & Information Technology AIRCC Computer Science Proceedings, ISSN No.2231-5403, DOI:10.5121/csit.2013.3622, Feb.18-20, 2013, pp.265-272, Bangalore, India, 2013

12. Mondal, U, Mandal, J. K., "An Analytical Approach to Generate Unique Song Signal(AUSS)",CSIT- 2013, Proceedings of Third International Conference on Computer Science & Information Technology AIRCC Computer Science Proceedings, ISSN No.2231-5403, DOI:10.5121/csit.2013.3622, Feb.18-20, 2013, pp.09-216, Bangalore, India, 2013.
13. Mandal, J. K and Hassan, K L., "Agent based Intrusion Detection System in MANET",CSIT- 2013, Proceedings of Third International Conference on Computer Science & Information Technology AIRCC Computer Science Proceedings, ISSN No.2231-5403, DOI:10.5121/csit.2013.3622, Feb.18-20, 2013, pp.201-208, Bangalore, India, 2013.
14. Sengupta, M, Mandal, J K, "Image Coding through Z-Transformation with Low Energy and Bandwidth(IZEB)",CSIT- 2013, Proceedings of Third International Conference on Computer Science & Information Technology AIRCC Computer Science Proceedings, ISSN No.2231-5403, DOI:10.5121/csit.2013.3622, Feb.18-20, 2013, pp.225-232, Bangalore, India, 2013.
15. Sarkar, A, Mandal, J. K., "Secured wireless communication through Simulated Annealing Guided Triangularized Encryption by Multilayer Perceptron generated Session Key(SATMLP)",CSIT- 2013, Proceedings of Third International Conference on Computer Science & Information Technology AIRCC Computer Science Proceedings, ISSN No.2231-5403, DOI:10.5121/csit.2013.3622, Feb.18-20, 2013, pp.217-224, Bangalore, India, 2013.
16. Mandal J K and Ghosh, A., "Edge Detection by Modified Otsu Method", CSIT- 2013, Proceedings of Third International Conference on Computer Science & Information Technology AIRCC Computer Science Proceedings, ISSN No.2231-5403, DOI:10.5121/csit.2013.3622, Feb.18-20,2013,pp.233-240, Bangalore, India, 2013.
17. Sengupta, M and Mandal, J. K., "Self Authentication of Images through Daubechies Transform Technique(SADT), First International Conference on Intelligent Infrastructure in conjunction with CSI-2012,Kolkata,1-2 December,2012, ISBN -13:978-1-25-906170-7, Published by McGraw Hill Professional, New Delhi, pp.249-252,2012.
18. J K Mandal and Aparna Sarkar, "A Modified Directional Weighted Cascaded-Mask Median Filter for Removal of Random Impulse Noise", Second International Conference on Computer Science, Engineering & Applications (ICCSEA-2012), paperID-44, May 26 ~ 27, 2012, Delhi, India.
18. J K Mandal and Deabashis Das, "Steganography using Adaptive Pixel Value Differencing (APVD) of Gray Images Through Exclusion of Overflow/Undflow" Second International Conference on Computer Science, Engineering & Applications (ICCSEA-2012), paperID-45, May 26 ~ 27, 2012, Delhi, India.
19. Jyotsna Kumar Mandal and Sudipta Ghoshal," A High Payload Steganographic Technique for Color Images (HPST)", The International Conference on Information Systems Design and Intelligent Applications-2012,(INDIA-2012),USISBN:978-981-07-1158-0,5-7January,2012, pp. 65-70, Visakhapatnam, 2012.
20. Jyotsna Kumar Mandal and Subhankar Ghatak, "Visual Cryptographic Protocol through Transform based Encoding Embedded into Meaningful Shares (VCPTE)", The International Conference on Information Systems Design and Intelligent Applications-2012(INDIA-2012),US-ISBN: 978-981-07-1158-0,5-7 Jan, 2012, Visakhapatnam, 2012.
21. Rajdeep Chakraborty, Sridipta Misra, Sunit Kumar Agarwal, Vineet Khemka, Sonam Agarwal and J. K. Mandal, "Efficient Hardware Realization of Triple Data Encryption Standard (TDES) Algorithm using Spartan-3E FPGA", International Conference on Issues and Challenges in Networking, Intelligence and Computing (ICNICT 2011),2-3 September, 2011,Ghaziabad, Department of Computer Science and Engineering, Krishna Institute of Engineering and Technology (KIET), India,Computer Society of India (Ghaziabad Chapter), International Neural Network Society (India Regional Chapter), International Journal of Advanced Research in Computer Science and Ubiquitous Computing and Communication Journal, and published by Nandani Prakashan Pvt. Ltd., New Delhi, India, ISBN – 978-93-81126-27-1, pp 60 – 63,2011.
22. Mandal J. K., Som, Subhranil,Kundu, S, "Artificial Intelligence Based Compression and Elliptic Curve Based Encryption Technique Over Binary Finite Field", Proceeding of International Conference on Convergence of Optics and Electronics, March 26-27,2011, Science City Kolkata, India COE2011,pp. 30-36, ISBN :978-81-906401-1-4, 26-27thMarch, 2011.
23. J.K. Mandal and A. Khamrui, "A Data Embedding Technique for Gray scale Image Using Genetic Algorithm (DEGGA)" (SP_2011_2001), IEEE sponsored International Conference on Communication, Computing & Security (Proceedings by Excel India Publishers ISBN-978-93-80697-505),NIT Rourkela, 7-9 Jan,2011, pp.19-22,2011.
24. P.K.Jha, J.K.Mandal, G.P.Sharma, "Design of A Cryptographic Protocol Using Recursive Pairs & Bitwise Operation on A Block (RPBOB)",IEEE sponsored International Conference on Communication, Computing & Security (Proceedings Excel India Publishers ISBN-978-93-80697-505),NIT Rourkela,Paper ID:CI_2011_5005,7-9 Jan,2011,pp.399-402,2011.
25. Dr. Pawan Kumar Jha, Dr. Jyotsna Kumar Mandal, "Space Efficient Cryptographic Protocol Using Recursive Bitwise & Pairs Of Bits Of Operation (RBPBO), Proceeding of International Conference on Computing and Systems ICCS-2010,ISBN 93-80813-01-05,pp 11-15, Burdwan, November, 2010.
26. Mr. Nikhilesh Barik, Dr. Sunil Karforma, Dr. Jyotsna Kumar Mandal, Ms. Arpita GhoshProceeding of International Conference on Computing and Systems ICCS-2010, pp 80-85 Burdwan, November, 2010.
27. J.K Mandal, Nabin Ghoshal, "Image Authentication Technique in Frequency Domain based on Discrete Fourier Transformation (IATFDDFT)".Proceeding of International Conference on Computing and Systems ICCS-2010, Burdwan, November, 2010.
28. J.K. Mandal, Madhumita Sengupta, "Self Authentication of color image through Wavelet Transformation Technique (SAWT)". Proceeding of International Conference on Computing and Systems ICCS-2010, pp 151-155 Burdwan, November, 2010.
29. J.K. Mandal, Subhankar Ghatak, "A Novel Technique For Secret Message / Image Transmission Through (2,2) Visual Cryptographic Protocol", Proceeding of International Conference on Computing and Systems ICCS-2010, pp 175-181, Burdwan, November, 2010.
30. J.K. Mandal, S. Mukhopadhyay, "A Novel Directional Weighted Minimum Deviation (DWMD)Based Filter for Removal of Random Valued Impulse Noise", Proceeding of International Conference on Computing and Systems ICCS-2010, pp 214-220, Burdwan, November, 2010.
31. J.K Mandal, Arindam Sarkar, "Neural Network Guided Secret Key based Encryption through Cascading Chaining of Recursive Positional Substitution of Prime Non-Prime (NNSKECC)", Proceeding of International Conference on Computing and Systems ICCS-2010, pp 291-298, Burdwan, November, 2010.
32. Uttam Kr. Mondal, Satyendra Nath Mandal, J. PalChoudhury, J. K. Mandal, "A New Approach to Cryptography" published in International Conference on Systemics, Cybermatics and Informatics – ICSCI 2009, held on January 07 – 10, 2009 in Dr. MCR HRD institute, Govt. of Andhra Pradesh, Road No. 25, Jubilee Hills, Hyderabad, pp. 294 – 297,2009.

33. Uttam Kr. Mondal, Satyendra Nath Mandal, J. PalChoudhury, J. K. Mandal, "Octant Based Cryptography – An Innovative Approach to Symmetric Key Cryptography" published in 2009 IEEE International Advance Computing Conference (IACC 2009), Thapar University, Patiala, India, ISBN: 978-1-4244-2927-1, pp. 3484 – 3489, on 6 – 7 March, 2009,
34. Mandal, J. K., Som, S. et al, "Blockwise Bits manipulation Technique(BBMT)", "Proc. Of International Conference on Advance Computing(ICAC'09)", Published by MCMILLAN, pp. 297-302, Tiruchirapalli, India, ISBN 978-0230-63915-7, 6-8 August, 2009.
35. Rajdeep Chakraborty and J.K. Mandal, "A Microprocessor-Based Stream Cipher Through Stream Addition Technique (SAT)", published in International Conference on Systems, Cybernetics and Informatics (ICSCI 2009), held on January 07-10, 2009 at Hyderabad, India, organized, sponsored and, published by Pentagram Research Center Pvt. Ltd. Hyderabad, India, Volume 1 of 2, pp 41-45, 2009.
36. Mandal, J. K. Chakraborty, R, "Ensuring e-Security through Microprocessor Based Recursive Transposition Technique", Proceedings of 2nd International Conference on Information Technology, INTL-INFOTECH 2007(ISSN-0973-6824), March 19-21, pp. 62-65, Haldia, India, 2009.
37. J. K. Mandal, Uttam Kr. Mandal, Satyendra Nath Mandal, J. Pal Chaudhury "A New Approach to Cryptography", Proc. International Conference on Systemics, Cybernetics and Informatics (ICSCI 2009), Hyderabad, January 07-10, 2009, pp. 294-297, 2009.
38. P. Halder, J. K. Mandal and P.Dutta, "A Soil Management System Of Tea Garden Using GIS Based Database Management System (GISSMS)", Proc. International Conference on Systemics, Cybernetics and Informatics (ICSCI 2009), Hyderabad, January 07-10, 2009, pp. 569-573, 2009.
39. Mandal, J. K.(co-author) et al, "Image Authentication by hiding Large Volume of Data and Secure Message Transmission Technique using Mask(IAHLVDSMTTM)", IEEE International Advance Computing Conference (IACC), ISBN:978-981-08-2465-5 March 6-7,2009,pp. 3177-3182 Thapar University, Patiala, Punjab, 2009.
40. J. K. Mandal and M. Das, "Fibonacci Based Position Substitution(FBPS) Encoder for Secured Message Transmission)", IEEE International Advance Computing Conference (IACC), ISBN:978-981-08-2465-5 March 6-7,2009, Thapar University, Patiala, Punjab, 2009.
41. Rajdeep Chakraborty and J.K. Mandal, "Ensuring e-Security through Microprocessor-Based Recursive Transposition Technique (RTT)", published in 12th International Conference on Information Technology (ICIT 2009), held on December 21-24, 2009, at Bhubaneswar, India, organized and sponsored by IEEE, IEEE Computer Society, Orissa Information Technology Society (OITS), Temple City Institute of Technology and Engineering (TITE), Silicon Institute of Technology, IIIT, NIST, OCAC and Techno India Group (Kolkata), and published by Tata McGraw Hill Education Private Limited, New Delhi, India, ISBN-10: 0-07-068104-0, ISBN-13: 978-0-07-068104-2, pp 66-69,2009.
42. Mandal, J. K, Jha, P.K., et al, "A Bit-Level Symmetric Encryption Technique Through Recursive Addition of Blocks(RBA)", International Conference On Electronic Commerce in the 21st Century(ECIC-2008), June 2-4,2008.
43. Rajdeep Chakraborty and J.K. Mandal, "An Approach Towards Digital Content Protection Through Two Pass Replacement Technique (TPRT)", published in First International Conference on Information Technology (INTL-INFOTECH 2007), held on March 19-21, 2007 at Haldia, INDIA, organized and sponsored by Department of Computer Science and Informatics, Haldia Institute of Technology (HIT), Technical Education Quality Improvement Program (TEQIP), Computer Society of India (CSI) (Kolkata), TEQIP network Partners, University of Calcutta (Kolkata), Govt. College of Engineering and Ceramic Technology (Kolkata), and published by Vitasta Publishing Pvt. Ltd., New Delhi, India, ISBN 81-89766-74-0, pp 62-65, 2007.
44. Mandal, J. K., Jha, P.K., "Encryption through Cascaded Recursive Carry and Session key Arithmetic(CRCSKA)", Proceedings of International Conference on Intelligent Systems (ICIS-07),DMI College of Engineering,Chennai, India,pp-1-8, January 19-20, 2007.
45. Mandal, J. K.,Jha, P.K, Shakya, S., "Encryption through Cascaded Recursive key Rotation of a Session Key and Addition of Blocks(CRKAB)" Proceedings of First International Conference on Information Technology, INTL-INFOTECH 2007(ISSN-0973-6824), March 19-21,pp. 56-61, Haldia, India, 2007.
46. Mandal, J. K., et al, "A Pest Management System of Tea Garden Using GIS Based Database Management System", Proceedings of First International Conference on Information Technology, INTL-INFOTECH 2007(ISSN-0973-6824), March 19-21, pp. 261-264, Haldia, India, 2007.
47. Mandal, J.K., et al, "Weed Control System of Tea Garden Using GIS Based Database Management System", International Conference on Modeling and Simulation CIT, Coimbatorepp. 1252-1257, 27-29 August 2007.
48. Mandal, J. K.,Jha, P.K "Cascaded Encryption through Recursive Transposition and key Arithmetic of a Session Key (CRTKA)",Proceedings of International Conference of Indian Recent trends in IT and Soft Computing, Indian Institute of Management Technology, Nov.19-20, IMT, Nagpur,India, pp. 59-71, 2006.
49. Mandal, J. K.,Jha, P.K "Encryption through Cascaded Recursive Session key and Carry Addition(CRSKCA)" Proceedings of First International Conference on Security and Computer Forensics(ISCF-2006), Dec.6-8,pp.19-25,SRM Engineering College, SRM University,(Published by Allied Publishers P. Ltd.), Chennai, India, 2006.
50. Mandal, J. K., Mal, S, and Sinha, S, "Microprocessor Based Encoder Through Selective Positional Orientation of Bits (SPOB), Pro. of International Conference on Cybernetics, Guahati, January 01-03, 2004.
51. Mandal, J. K., Chaudhuri, A., " An Error-Correction Technique for Jcode", Proc.,3rd International Workshop on Telematics, NERIST, India, Dec. 13-16, 1998.
52. Mandal, J. K., Chaudhuri, A., "Clustering Method of Data Compression for Distributed File Systems", Proc. 2nd International Workshop on Telematics, NERIST, India, 19-20 May, 1997.
53. Mandal, J. K., Gangopadhyay, R., "Implementation of two Data Compression Schemes", Proc. 1st International Workshop on Telematics, NERIST, India, 14-15th June,1995.

Publication in the International Conferences Outside India: 17

1. Mandal, J. K., Som, S. et al, "Key Based Bit Level Genetic Cryptographic Technique (KBGCT)", 11th International Conference on Hybrid Intelligent Systems, 5th – 8th December 2011, Universiti Teknikal Malaysia Melaka, Melaka, Malaysia, 2011.
2. Uttam Kr. Mondal, and J.K. Mandal, "A Practical Approach of Embedding Secret Key to Authenticate Tagore Songs(ESKATS)", 2nd International Conference on Wireless Information Networks & Business Information System (WINBIS 09), organized by Rural Nepal Technical Academy (Pvt.) Ltd, Nepal, ISSN No : 2091-0266, to be held 28th Feb.- 1st March, 2010.
3. Mandal, J. K., Jha, P.K, "Encryption Through Cascaded Recursive Key Rotation and Arithmetic operation of Session Key(CRKRAO), ICT Conference 2007, International Convention Centre(BICC), Organized by Computer Association of Nepal(CAN), Jan.10-12, 2007, Kathmandu. 2007.
4. Mandal, J. K., Palchoudhury, J., "Forecasting of Tea Production Using Neural Network Based on Fuzzy Data, ICT Conference 2007, International Convention Centre (BICC), Organized by Computer Association of Nepal(CAN), Jan.10-12, 2007, Kathmandu, 2007.
5. Mandal, J. K., Chatterjee, R., "Authentication of PCs with Cascaded Encryption Technique(CE Technique)", Fourth International Conference on Bridging the Digital Divide (Asian Applied Computing Conference(AACC2007)), Kathmandu, 13-15th December, 2007, Nepal, 2007.
6. Mandal, J. K., Sarkar, S. K., Sarkar S., "Genetic Approach for High Speed Efficient Nano Devices", Proceedings of International Conference of Nano Technology, Sanfransisco, USA, 4-5 Nov., 2007
7. Mandal, J. K., Jha, P.K, "Cascaded Recursive Session key Arithmetic and key Rotation of a session key(CRKAKRK)", Proceedings of 4th International Conference on innovative Applications of Information Technology for developing World (AACC-2007), Imperial, College Press, Covent Garden, London, WC2H9HE, 10-12th Dec- 2007, Kathmandu..
8. Mandal, J. K., Sinha, S., and Saha, S., "A Microprocessor Based Block Cipher through Bit-pair Operation and Separation (BOS)", IT Conference, Kathmandu, Nepal, 26-28 January 2006.
9. Mandal, J. K., Jha, P.K, "A Bit Level Symmetric Encryption Technique through Recursive Rotation (RKR) of a Session key", Proceeding ICT Conference(ICT-2006), AMSE, Vol-2, Kathmandu, Nepal, 26-28 January, 2006.
10. Mandal, J. K., Chatterjee R., "Authentication of PCs with Triangular Encryption Technique", Proceedings of 6th Philippine Computing Science Congress(PCSC 2006), Ateneo de Manila University, Manila, Philippine, March 28-29, 2006.
11. Mandal, J. K., Jha, P., "A Bit Level Symmetric Encryption Technique Through Recursive Arithmetic Operation (RAO) to Enhance the Security of Transmission" International Conference of Computer Association of Nepal (ICT 2005), 25-26th January, 2005 at BICC, Kathmandu, Nepal, 2005.
12. Mandal, J. K., Bhowmik C., "On Web Cartography of Urban Road Traffic Management System", Proc. 3rd International Conference on Innovation application of Information Technology for developing world, AACC 05, Kathmandu Engineering College, Kathmandu, 10-12 Dec. 2005.
13. Mandal, J. K., Jha, P.K, "A Symmetric encryption technique through recursive module-2 operation of pair of bits of Streams(RMOPB)", Proceedings of third International Conference on innovative Application of Information Technology for developing World(AACC-2005), Imperial College Press, Covent garden, London, WC2H9HE, held during 10-12th Dec- 2005, Kathmandu, Nepal, 2005.
14. Mandal, J. K. "Encryption Through Conceptual Mapping of Bits " Proc. of 1st International Technology Symposium, Institute of Engineers, Tribhuvan University, Kathmandu, Nepal, 22-30 December, 2003.
15. Mandal, J. K. "Security Aspects of Integrated Data and Voice Network in Campus LAN " Proc. Of 1st International Technology Symposium, Institute of Engineers, Tribhuvan University, Kathmandu, Nepal, 22-30 December, 2003.
16. Mandal, J. K., Dutta, S., Mal, S., "A Multiplexing Triangular Encryption Technique – A Move Towards Enhancing Security in E-Commerce, Proc. of Conference of Computer Association of Nepal, December, 2001.
17. Mandal, J. K., Dutta, S., "A Space-Efficient Universal Encoder for Secured Transmission", International Conference On Modelling and Simulation (MS' 2000– EGYPT), 11-14 April, CAIRO, pp. 193-201, 2000.

Publication in Cryptology ePrint Archive.: 01

1. Mandal, J. K. Dutta, S., "An Approach to Ensure Information Security Through 252-Bit Integrated Encryption System (IES), <http://eprint.iacr.org/2008/360>, Cryptology ePrint Archive, Paper No. 360, 2008

Publications in National Conferences

Publication in the Springer National Conferences: 02

1. Bandopadhyay, S, Thakur, S S, Mandal, J K., "Mining user data based on customer's Rating for Prediction and Recommendation – A Comparative Analysis", Lecture Notes in Networks and Systems, pp.45-54, 2019
2. Hassan, K L and Mandal, J K., "Performance Analysis of AnyHocNet based on NS2, Lecture Notes in Networks and Systems, pp.45-54, 2019

1. Mondal, U., M, Mandal, J. K., “Secret Code embedded Authentication of Songs(SEAS)”, IEEE National Conference on Emerging Trends and Applications in Computer Science-2012(NCETACS 2012), 29th – 31st March,2012, St. Anthony College Shilong, India,2012.
2. Mandal, J. K., Saha, M., “Simulation of Triangular Encoder (TE) in FPGA based System for a Layer of Security in Embeded System”, Proceedings of IEEE National Conference on Computing & Communication System (CoCoSys-09), Burdwan University, Burdwan, Jan. 02-04, India(accepted for publication), 2009.
3. Mandal, J. K., Jha, P. K., “Encryption Through Cascaded Recursive Key Rotation of a Session Key with Transposition and Addition of Blocks (CRKRTAB), Proceed.. Of National Conference of Recent Trends in Information Systems (ReTIS-06), IEEE Calcutta Chapter & Jadavpur University, pp. 69-72, 14-15 July 2006.

Publication in the National Conferences in India:49

1. H. Mahanta and Mandal, J. K., “Supermap iServer 6R, an user friendly GIS server for easy publishing and managing large spatial data at World Wide Web” published in the proceedings of 20th West Bengal State Science and Technology Congress, Bengal Engineering and Science University, 28.2.13-.2.3.13, 2013
2. Mandal, J. K., Sarkar, A., “Cascaded Window based DWM Filter for Removal of RVIN” published in the proceedings of UGC Sponsored National Conference on Computing and Systems(NaCCS-2012) in Department of Computer Science, University of Burdwan, India 15-16 March,2012, ISBN 93-80813-18-X, pp.158-162 2012.
3. Mandal, J. K., Kanji, R., “Watermarking into Imaginary Coefficient of Z Domain(WIZD)”, published in the proceedings of UGC Sponsored National Conference on Computing and Systems(NaCCS-2012) in Department of Computer Science, University of Burdwan, India 15-16 March,2012,ISBN 93-80813-18-X,pp. 219-223, 2012.
4. Mandal, J. K., Ghoshal, S., “Separable Discrete Hartley Transform based Embedding for Color Image Authentication(SDHTECIA) published in the proceedings of UGC Sponsored National Conference on Computing and Systems(NaCCS-2012) in Department of Computer Science, University of Burdwan,India,15-16 March, 2012,ISBN 93-80813-18-X, pp. 178-183, 2012.
5. Mandal, J. K., Hasan, K. L., “Performance Analysis of MANET Routing Protocols based on Node Mobility” published in the proceedings of UGC Sponsored National Conference on Computing and Systems(NaCCS-2012) in Department of Computer Science, University of Burdwan,India,15-16 March, 2012,ISBN 93-80813-18-X, pp.213-218, 2012.
6. Sengupta, M.,Mandal, J. K., “Ownership verification in Wavelet Domain(OVWD)”, published in the proceedings of UGC Sponsored National Conference on Computing and Systems(NaCCS-2012) in Department of Computer Science, University of Burdwan,India,15-16 March, 2012,ISBN 93-80813-18-X, pp. 224-228, 2012.
7. Mandal, J. K.,Sarkar, Arindam, “Neural Session Key based Triangularized Encryption for Online Wireless Communication(NSKTE)”, published in the proceedings of UGC Sponsored National Conference on Computing and Systems(NaCCS-2012) in Department of Computer Science, University of Burdwan,India,15-16 March, 2012,ISBN 93-80813-18-X,pp.172-177 2012.
8. P. K. Jha, J. K. Mandal, “Design and Analysis of Recursivly Modulo-2 and Bitwise Operations of Paired Bits (RMBOPB)” published in the proceedings of UGC Sponsored National Symposium on Emerging Trends in Computer Science (ETCS) 2012 in Department of Computer Science, Barrackpur Rastraguru Surendranath College, Organized jointly BRSC_CU_KU,India , ISBN 978–81–921808–2–3, 2012.
9. Sengupta, M, Mandal, J. K. “Authentication in Wavelet Transform Domain through Hough Domain Signature (AWTDHDS)” published in the proceedings of UGC Sponsored National Symposium on Emerging Trends in Computer Science (ETCS) 2012 in Department of Computer Science, Barrackpur Rastraguru Surendranath College, Organized jointly BRSC_CU_KU, India , ISBN 978–81–921808–2–3, 2012.
10. Mandal, J. K.(co-author) et al, “An Image Authentication in Z-Domain (IAZ-D)” published in the proceedings of UGC Sponsored National Symposium on Emerging Trends in Computer Science (ETCS) 2012 in Department of Computer Science, Barrackpur Rastraguru Surendranath College, Organized jointly BRSC_CU_KU, India ISBN 978–81–921808–2–3, 2012.
11. Mandal, J. K., Ghatak, S., “A Novel (2, 2) Visual Cryptographic Technique with Constant Aspect Ratio (VCTCAR)” published in the proceedings of UGC Sponsored National Symposium on Emerging Trends in Computer Science (ETCS) 2012 in Department of Computer Science, Barrackpur Rastraguru Surendranath College, Organized jointly BRSC_CU_KU, India,ISBN 978–81–921808–2–3, 2012.
12. Mandal J. K., Chakraborty, A, et al, “A GIS based approach to view the Employee’s Transfer information using KD Tree” published in the proceedings of UGC Sponsored National Symposium on Emerging Trends in Computer Science (ETCS) 2012 in Department of Computer Science, Barrackpur Rastraguru Surendranath College, Organized jointly BRSC_CU_KU, India, ISBN 978–81–921808–2–3, 2012.
13. Mandal, J. K.,Nandi, U.,“Size Adaptive Region Based Huffman Compression Technique (SARBH)” published in the proceedings of UGC Sponsored National Symposium on Emerging Trends in Computer Science (ETCS)

- 2012 in Department of Computer Science, Barrackpur Rastraguru Surendranath College, Organized jointly BRSC_CU_KU, India ISBN 978-81-921808-2-3, 2012.
14. Mandal J. K, Mondal U. K, , "A New Approach to Enhance Security of Visual Cryptography using Steganography(VisUS)", National Conference on Next Generation Computing and Information Security(NCNGCIS 2011), PID 01064, Organized by CSI Noida Chapter and CSIR at Institute of Management Studies, March 25-26, 2011.
 15. Uttam Kr. Mondal, Dibyendu Jana, J. K. Mandal, "A Study on Performance Tuning of Standard Cryptography Techniques" published in National Conference on Computing & Systems 2010 (NACCS 2010) held on 29th January, 2010 in Department of Computer Science, Gopalbag, The University of Burdwan, Burdwan – 713100, West Bengal, India pp. 125 – 128, ISBN 819077417 – 4, 2010.
 16. P. K. Jha, J. K. Mandal, "Encryption Through Bitwise and Arithmetic Operation of Blocks for a session key(BAOB)" published in National Conference on Computing & Systems 2010 (NACCS 2010) held on 29th January, 2010 in Department of Computer Science, Gopalbag, The University of Burdwan, Burdwan – 713100, West Bengal, India pp. 156 – 161, ISBN 819077417 – 4, 2010
 17. Uttam Kr. Mondal, Satyendra Nath Mandal, J. Pal Choudhury and J.K. Mandal, "A New Method of Cryptography for English Literature with Reconstructing Characters Bit Pattern(RCBP)", IndiaCom-2009, jointly organized by Bharati Vidyapeeth, Delhi, Computer Society of India and Guru Gobind Singh Indraprastha University, Delhi, India, ISBN:978-81-904526-6-3, 26-27, 2008.
 18. Mandal, J.K., Halder, P., "A Polygon Based Thematic Map Representation Technique Using Database Management System". A National Conference on Emerging Trends in Information Technology, 28-29 January 2008, P.E.S. College of Engineering, Aurangabad, 2008.
 19. Mandal, J.K., Jha, P. K., "Cascaded Encryption Through Recursive Carry Addition and Bitwise Operation on Blocks(CRCABOB) of a Session Key", A National Conference on Emerging trends in Information Technology (NCETIT' 08), P. E. S. College of Engineering, Aurangabad(MS), India, January 28-29, 2008.
 20. Mandal, J. K., Som, S., "A Session Key Based Secure-Bit Encryption Technique(SBET)", Proceedings of 2nd National Conference on Computing for Nation Development, Bharati Vidyapeeth's Institute of Computer Applications and Management, New Delhi,, pp. 197-202, ISSN 0973-7529, ISBN 978-81-904526-2-5, 08th -09th February 2008.
 21. Mandal, J. K., Paul, M., "A Permutative Cipher Technique (PCT) to Enhance the Security of Network Based Transmission", Proceedings of 2nd National Conference on Computing for Nation Development, Bharati Vidyapeeth's Institute of Computer Applications and Management, New Delhi,, pp. 197-202, 08th -09th February 2008.
 22. Mandal, J. K., et al, "A Technique to produce Multilayer Images, National Conference on Trends and Advances in Computer Aided Design and Engineering(TACADE-2007), Feb. 16-17, pp. 215-220, Kalyani Govt. Engg. College, Kalyani, West Bengal, 2007.
 23. Mandal, J.K., Das, S., "A Fertilizer Scheduling Approach on Tea Bushes Using GIS Based Database Management System" Proceedings of National Conference on Information Technology, Asia Pacific Institute of Management, New Delhi, 2007, pp. 502-506, Aug. 31-Sep. 1, 2007
 24. Mandal, J. K., Jha, P.K "Encryption through Cascaded Arithmetic Operation on Pair of Bits and Key Rotation (CAOPBKR)", Proceed.. of National Conference of Recent Trends in Intelligent Computing (RTIC-06), Kalyani Government Engineering College, Kalyani, Nadia, 17-19 Nov. 2006, India, pp.212-220, 2006.
 25. Mandal, J. K, Sinha, S. "A Microprocessor-based Block Cipher through Decimal Equivalent Positional Substitutions(DEPS)", Proceed.. of National Conference of Recent Trends in Intelligent Computing (RTIC-06), Kalyani Government Engineering College, Kalyani, Nadia, 17-19 Nov. 2006, India, pp. 197-204, 2006.
 26. Mandal, J. K., Chatterjee, Rajeev, "Authentication of PCs With RPMS, PCA and RPSP Techniques", Proceed. Of National Conference on Recent Advances in Computing (NCRAC 2006), Sri Krishna College of Engineering and Technology, Coimbatore, Tamilnadu, INDIA, 21-22 December 2006.
 27. Mandal, J.K., Chatterjee, S, "Enhancement of Security of Transmission through Triangularization of Block(TOB), proceed of National Conference of Recent Trends in Intelligent Computing(RTIC-06), Kalyani Govt. Engg. College, Kalyani, Nadia, Nov 17-19, pp 178-183, 2006.
 28. Mandal, J. K., Das, S., "A GIS Based Bio Informatics Tool for Tea Garden Management", Proceedings of National Conference on Bioinformatics Computing (NCBC'05), Department of Computer Science & Engineering, Thapar Institute of Engineering & Technology (TIET), Patiala, March 18-19(TMh), India, 2005.
 29. Mandal, J. K, Ghosh, A. K. "A Hierarchical Classification Model for Rating Manufacturing Industries", Proc. Of National Conference on Software Engineering Principles and Practices, SEPP'04, 5-6 March, 2004. Thapar Institute of Engineering & Technology, Patiala, Panjab, India, 2004.
 30. Mandal, J. K "Aspects of Integrated Data and Voice Network in Campus LAN", Proceedings of the Int. Symposium on Information Technology: Emerging Trends, 22-27, September, IIIT, Alahabad, India, 2003.
 31. Mandal, J. K., et al, "A Microprocessor Based Encoder through Transposition of Bits", proceedings of the Int. Symposium on Information Technology: Emerging Trends, 19-21 September, 2003, pp.17-27.
 32. Mandal, J. K., et al, "A Cryptographic Model Applicable on Text Files", Proceedings of the conf. Of A. C. College of Commerce, Jalpaiguri, March 2003.

33. Mandal, J. K., Mal, S, Dutta, S, "Aspects of Storage-Efficient Security System in GIS Data, Proceedings of the Conf. of Indian Society of Remote Sensing on "Remote Sensing and GIS for Sustainable Development and Management in Himalaya and Adjoining Areas" held at NBU, March 8-9,2002.
34. Mandal, J. K., Choudhuri, A, "A Cascaded Data Compression Technique for Efficient Usage of Storage Space" Proc. XXXVI Annual Convention of CSI- 2001, November 20-24,2001,pp.C 192-198.
35. Mandal, J. K., Mal, S, and Dutta, S, "A microprocessor based cascaded technique of encryption" Proc. XXXVI Annual Convention of CSI, 2001, November 20-24,2001,pp.C 269-275.
36. Mandal, J. K., Mal, S, and Dutta, S, "A Cryptographic Model for secured Transmission of Messages" National Seminar on Applicable Mathematics (in web mechanics, WMNC 2001), Jalpaiguri AC College of Commerce, 17-19 March, 2001, India.
37. Mandal, J. K., Sinha, S., "A Storage Efficient Foot Print retrieval Scheme", 8th State Science & Technology Congress, 28Feb to 1st March , 2001, Kalyani University, Nadia, India.
38. Mandal, J. K., Mal, S., and Dutta, S "A Microprocessor Based Universal Encoder Model", 8th State Science & Technology Congress, 28Feb to 1st March , 2001, Kalyani University, Nadia, India.
39. Mandal, J. K., Mal, S., and Dutta, S., "Aspects of Security in E-Business" , UGC National Seminar on Emerging Issues and Strategic Options before Business in the Liberalised Regim, 7th March, 2001,NBU, India.
40. Mandal, J. K., Dutta, S., " A Universal Bit-level Encryption Technique", Seventh Vigyan Congress, Jadavpur University, India, 28Feb to 1st March, 2000.
41. Mandal, J. K., Mal, S, and Dutta, S, "A Microprocessor-Based Encoder for Secured Transmission", Proc. Of Intelligent Computing and VLSI, pp.164-169,Kalyani Govt. Engg. College, India, 1999.
42. Mandal, J. K., Dutta, S., "A Universal Encryption Technique" Proc. Of the National Conference on Networking of Machines, Microprocessors, It and HRD need of the Nation of the Next Millennium, 25-26 Nov., pp B114-B120,1999.
43. Mandal, J. K., Chaudhuri, A., "An Approach Towards Implementation of Arithmetic Coding For Different Data/Image Compression Schemes", Sixth Vigyan Congress, B. E. College, India, 26-28 Feb 1999.
44. Mandal, J. K., Chaudhuri, A., "A Cascaded Image Compression Scheme", N.B.U. Review(Sci & Tech.), India.Vol. 8, No. 2, 1999.
45. Mandal, J. K., Chaudhuri, A., "An Efficient Signature-data Compression Technique", 5th Vigyan Congress, NBU, India,21-23 March, 1998.
46. Mandal, J. K., Chaudhuri, A," A Scheme for Cost-Effective and Reliable Transmission", NIDS-98, CSI, Darjeeling, India, 18-19 Apr.,1998.
47. Mandal, J. K., Chaudhuri, A., Dey, P. K., "System of Social Identity Through Storage Efficient Coding Scheme", CSI-97, India.13-16 Nov., 1997.
48. Mandal, J. K., Chaudhuri, A.,"A Coding Scheme for Management of Infiltration in North-East", Proc., COMNET-97, CSI, Patna,13-14 Sept., 1997.
49. Mandal, J. K., Dey, P. K.,"Implementation of an Image Compression Scheme", Proc. of Eastern Regional Convention (ERC-95), CSI, India,14 -15th April, 1995.

Books Published by International Publishers

http://www.amazon.com/s/ref=ntt_athr_dp_sr_2?encoding=UTF8&field-author=J.%20K.%20Mandal&search-alias=books&sort=relevancerank

Books:

- **Title:** [Reversible Steganography and Authentication via Transform Encoding from Springer](https://link.springer.com/book/10.1007/978-981-15-4397-5) (<https://link.springer.com/book/10.1007/978-981-15-4397-5>), June 2020, Author J K Mandal, published by Springer Nature
- **Title:** *Algorithmic Design of Compression Schemes and Correction Techniques – A Practical Approach*, **Publisher:** LAP- Lambert Academic Publishing, ISBN: 978-3-8433-9274-7, January 2011(Author- J. K. Mandal) (http://www.amazon.com/s/ref=ntt_athr_dp_sr_2?encoding=UTF8&field-author=Jyotsna%20Kumar%20Mandal&search-alias=books&sort=relevancerank)
- **Title:** *Symmetric Encryption – Algorithm, Analysis and Applications:Low Cost based Security*, **Publisher:** LAP- Lambert Academic Publishing, ISBN: 978-3-8454-2061-5, October 7, 2011(Author-P.K. Jha and J. K. Mandal)
- **Title:** *Steganographic Techniques and Application in Document Authentication – An Algorithmic Approach*, **Publisher:** LAP- Lambert Academic Publishing, ISBN: 978-3-8454-2919-9, August 30, 2011(Author- J. K. Mandal (Co-author) et al)
- **Title:** *Optimization based Filtering of Random Valued Impulses – An Algorithmic Approach*, **Publisher:** LAP- Lambert Academic Publishing, ISBN: 978-3-8473-7275-2, February 13, 2012 (Author-Somnath Mukhopadhyay and J. K. Mandal)

- **Title: Artificial Neural Network Guided Secured Communication Techniques: A Practical Approach, Publisher: LAP- Lambert Academic Publishing, ISBN: 978-659-11991-0, June 4, 2012 (Author-Arindam Sarkar and J. K. Mandal)**
- **Title: Methodologies and Application Issues of Contemporary Computing Framework: Springer Nature, Singapore, Author-(Jyotsna Kumar Mandal, Somnath Mukhopadhyay, Paramartha Dutta, Kousik Dasgupta)**
- **Title: Hand Book on Hardware Cryptography – Algorithms and Analysis: LAP- Lambert Academic Publishing, ISBN: 978-613-9-84165-3, July 10 2018 (Author - Rajdeep Chakraborty and Jyotsna Kumar Mandal)(page- 203) (<https://www.morebooks.de/store/gb/book/hand-book-on-hardware-cryptography-algorithms-and-analysis/isbn/978-613-9-84165-3>)**

Edited Books

- The edited volume “Topical Drifts in Intelligent Computing” -Proceedings of International Conference on Computational Techniques and Applications (ICCTA 2021) published by Springer Nature 28.04.2022. The Link: <https://link.springer.com/book/10.1007/978-981-19-0745-6>
- Mandal, J.K. & Sarkar, A.(2019) Special issue 2nd International Conference Devices for Integrated Circuits (DevIC-2017), Microsystem technologies, Springer, Microsyst Technol (2019) 25: 1853. <https://doi.org/10.1007/s00542-019-04429-9>, Volume 25, Issue 25, pp 1853–1853]
- Jyotsna Kumar Mandal, Abhijit Biswas, Dulal Acharjee, Special Issue on the 3rd International Conference Microelectronics, Circuits and Systems (Micro 2016), Special issue, Microsystem Technologies (Microsyst Technol (2019) 25: 1525. <https://doi.org/10.1007/s00542-019-04434-y>), May 2019, Volume 25, Issue 5, pp 1525–1525.
- Jyotsna Kumar Mandal, Somnath Mukhopadhyay, Contemporary Intelligent Systems (CSI 2017), Special issue in Innovations in Systems and Software Eng.ineering, Springer(A NASA Journal) Volume 15, Issue 1, March ISSN: 1614-5046 (Print) 1614-5054 (Online)(2019)
- Mandal, J.K., Acharjee, D. & Michel, B., Special issue on International Conference on Microelectronics, Circuits and Systems (Micro 2015) (Microsyst Technol (2017) 23: 4035. <https://doi.org/10.1007/s00542-017-3506-6>), held in Kolkata, India, July, 11–12, 2015, September 2017, Volume 23, Issue 9, pp 4035–4035
- Mandal, J.K., Acharjee, D. & Michel, B., Special Issue on the 1st International Conference Microelectronics, Circuits and Systems (Micro 2014), Microsystem Technologies (Microsyst Technol (2016) 22: 2601. <https://doi.org/10.1007/s00542-016-3135-5>), November 2016, Volume 22, Issue 11, pp 2601–2601
- J K Mandal et al., Handbook of Research on Natural Computing for Optimization Problems, Book Series: Advances in Computational Intelligence and Robotics (ACIR), Publisher: IGI Global (formerly Idea Group Inc.), ISSN: 2327-0411 Book Indexing: Thomson Reuters Book Citation Index, DBLP, etc., Year:May, 2016.
- J. K. Mandal, Paramartha Dutta, Somnath Mukhopadhyay, Advances in Intelligent Computing in the series " Studies in Computational Intelligence", Springer, ISSN: 978-981-10-8974-9,2019
- J. K. Mandal, D. D. Sinha, Intelligent Computing Paradigm: Recent Trends. Studies in Computational Intelligence, vol 784, Advances in Intelligent Computing in the series " Studies in Computational Intelligence", Springer, [https://link.springer.com/book/10.1007/978-981-13-7334-3\(2019\)](https://link.springer.com/book/10.1007/978-981-13-7334-3(2019))
- J K Mandal et al, Handbook of Research on Multi-objective Optimization in Science and Engineering Applications, Publisher: Springer (2018)

Edited book based on Conferences(as corresponding editor and co editor):

- “Innovations in Signal Processing and Embedded Systems, Proceedings of ICISPES”, Springer in the Book Series “Algorithms for Intelligent Systems” on 16.09.2022. The link is <https://link.springer.com/book/10.1007/978-981-19-1669-4>.
- Proceedings of International Conference on Network Security and Blockchain Technology, ICNSBT 2021, published by the Springer, June 2022. Presents research works in the field of network security and blockchain technology. Provides original works presented at ICNSBT 2021 held in Kolkata, India. Serves as a reference for researchers and practitioners in academia and industry. Published Part of the book series: Lecture Notes in Networks and Systems (LNNS, volume 481). Editors: Debasis Giri, Jyotsna Kumar Mandal, Kouichi Sakurai and Debashis De. The link is: <https://link.springer.com/book/10.1007/978-981-19-3182-6>
- The edited volume “Topical Drifts in Intelligent Computing” -Proceedings of International Conference on Computational Techniques and Applications (ICCTA 2021) published by Springer Nature 28.04.2022. The Link: <https://link.springer.com/book/10.1007/978-981-19-0745-6>
- Advanced Techniques for IoT Applications, Proceedings of EAIT 2020, Editors: Mandal, Jyotsna Kumar, De, Debashis (Eds.), Lecture Notes in Networks and Systems (<https://www.springer.com/gp/book/9789811644344>), Springer Nature. 2021.
- Proceedings of International Conference on Computational Intelligence and Computing, ICCIC 2020, Editors: Mandal, Jyotsna Kumar, Roy, Joyanta Kumar (Eds.), Algorithms for Intelligent Systems (<https://www.springer.com/gp/book/9789811633676>), Springer Nature. 2021.

- Proceeding of Fifth International Conference on Microelectronics, Computing and Communication Systems, MCCS 2020, Editors: Nath, Vijay, Mandal, J.K. (Eds.), Lecture Notes in Electrical Engineering (<https://www.springer.com/gp/book/9789811602740>), Springer Nature. 2021.
- Advances in Medical Physics and Healthcare Engineering Proceedings of AMPHE 2020, Editors: Mukherjee, M., Mandal, J.K., Bhattacharyya, S., Huck, C., Biswas, S. (Eds.), Lecture Notes in Bioengineering (<https://www.springer.com/gp/book/9789813369146>), Springer Nature. 2021.
- Computational Intelligence in Communications and Business Analytics, Third International Conference, CICBA 2021, Santiniketan, India, January 7–8, 2021, Revised Selected Papers, Editors: Dutta, Paramartha, Mandal, Jyotsna K., Mukhopadhyay, Somnath (Eds.), Communications in Computer and Information Science (<https://www.springer.com/gp/book/9783030755287>), Springer Nature. 2021.
- Advances in Smart Communication Technology and Information Processing, Optronix 2020, Editors: Banerjee, Soumen, Mandal, Jyotsna Kumar (Eds.), Lecture Notes in Networks and Systems (<https://www.springer.com/gp/book/9789811594328>), Springer Nature. 2020.
- Computational Intelligence and Machine Learning, Proceedings of the 7th International Conference on Advanced Computing, Networking, and Informatics (ICACNI 2019), Editors: Mandal, J.K., Mukherjee, I., Bakshi, S., Chatterji, S., Sa, P.K. (Eds.), Advances in Intelligent Systems and Computing (<https://www.springer.com/gp/book/9789811586095>), Springer Nature. 2020.
- Nanoelectronics, Circuits and Communication Systems, Proceeding of NCCS 2019, Editors: Nath, Vijay, Mandal, J.K. (Eds.), Lecture Notes in Electrical Engineering (<https://www.springer.com/gp/book/9789811574856>), Springer Nature. 2020.
- Applications of Internet of Things, Proceedings of ICCCIOT 2020, Editors: Mandal, Jyotsna K., Mukhopadhyay, Somnath, Roy, Alak (Eds.), Lecture Notes in Networks and Systems (<https://www.springer.com/gp/book/9789811561979>), Springer Nature. 2020.
- Intelligent Computing: Image Processing Based Applications, Editors: Mandal, J. K., Banerjee, Soumen (Eds.), Advances in Intelligent Systems and Computing (<https://www.springer.com/gp/book/9789811542879>), Springer Nature. 2020.
- Proceedings of the Fourth International Conference on Microelectronics, Computing and Communication Systems, MCCS 2019, Editors: Nath, Vijay, Mandal, J. K. (Eds.), Lecture Notes in Electrical Engineering (<https://www.springer.com/gp/book/9789811555459>), Springer Nature. 2019.
- Proceedings of the Global AI Congress 2019, Editors: Mandal, Jyotsna Kumar, Mukhopadhyay, Somnath (Eds.), Advances in Intelligent Systems and Computing (<https://www.springer.com/gp/book/9789811521874>), Springer Nature. 2019.
- Information Photonics and Communication, Proceedings of Second National Conference, IPC 2019, Lecture Notes in Networks and Systems (79), Springer, 2019.
- Intelligent Computing Paradigm: Recent Trends, Studies in Computational Intelligence (784), Springer, 2019
- Nanoelectronics, Circuits and Communication Systems, Lecture Note in Electrical Engineering, Springer Nature, No.:86964762 (in Press), 2018.
- Emerging Technology in Modelling and Graphics - Proceedings of IEM Graph 2018, Organized by the Department of Computer Science & Engineering, Institute of Engineering & Management, Kolkata, India, September, 6 - 7 2018, Corresponding Editor of the Proceedings to be published in Advances in Intelligent Systems and Computing (AISC), Springer Verlag, Switzerland, 2018
- Second international Conference, CICBA 2018, Organized by Kalyani Government Engineering College, Kalyani, 27-28 July 2018, Proceedings to be published in CCIS Series of Springer Verlag Switzerland, 2018.
- Nanoelectronics, Circuits and Communication Systems - Proceeding of NCCS 2017, 12-13 May, organized by the IETE Ranchi Center, book series, Lecture Notes in Electrical Engineering, member of Editorial Board, Advances in Intelligent Systems and Computing (AISC), Springer Verlag, Switzerland, 2018.
- International Ethical Hacking Conference, eHaCON 2018, Organized by the Department of Information Technology, Institute of Engineering & Management, Kolkata, India, April, 6 - 7 2018, member of Editorial Board, of the Proceedings to be published in Advances in Intelligent Systems and Computing (AISC), Springer Verlag, Switzerland, 2018.
- International Conference on Contemporary Advances in Innovative & Applicable Information Technology (ICCAIAIT 2018) Kingston Educational Institute, Barasat, 24-25th March 2018, Corresponding Editor, Proceedings to be published - Springer AISC Series, Springer Verlag, Switzerland (in Press), 2018
- International Conference on Emerging Technologies in Data Mining and Information Security, IEMIS 2018, UEM, Rajarhar, Kolkata, 23-25 February, 2018, Editor, Proceedings to be published - Springer AISC Series, Springer Verlag, Switzerland (in Press), 2018
- International Conference on Social Transformation – Digital Way, 52nd Annual Convention of Computer Society of India, 19-21st January, 2018 at science City Kolkata, member of Editorial Board, Program Chair, Corresponding Editor of the Proceedings published - Springer CCIS Series, Springer Verlag, Switzerland, 2018
- 11th International Conference on Advanced Computing & Communication Technologies' [11th ICACCT 2017], Asia Pacific Institute of Information Technology, Panipat on 17th -18th February, 2018, member of editorial Board of the Proceedings published - Advances in Intelligent Systems and Computing (AISC), Springer Verlag, Switzerland, 2018.
- 10th International Conference on Advanced Computing & Communication Technologies' [10th ICACCT 2016], Asia Pacific Institute of Information Technology, Panipat on 19th -20th November, 2016, member of editorial Board of the Proceedings published - Advances in Intelligent Systems and Computing (AISC), Springer Verlag, Switzerland Link: <https://books.google.co.in/books?isbn=3319120123>, 2017.
- First International Conference on Computational Intelligence, Communications, and Business Analytics (CICBA – 2017), during 23-24 March 2017 at Calcutta Business School, Kolkata, member of Editorial Board, Program Chair, Corresponding Editor of the Proceedings to be published - Springer CCIS Series, Springer Verlag, Switzerland (CCIS 704), 2017.

- The International Conference on Computing and Communication Systems - I3CS 2016, NEHU, Shillong, India , during 11-13 November, 2016 at Nehu, Shilong, member of editorial Board, Program Chair, Corresponding Editor of the Proceedings to be published -**Lecture Notes in Networks and System**, Springer Science, Singapore (in Press)(2017).
- First International Conference on Intelligent Computing and Communication, (ICIC2- 2016), during 18-19 February 2016 at University of Kalyani, member of editorial Board, Program Chair, Corresponding Editor of the Proceedings published -Advances in Intelligent Systems and Computing(AISC), Springer Verlag, Switzerland Link: <https://books.google.co.in/books?isbn=3319120123>, 2016
- Information Systems Design and Intelligent Applications Proceedings of Third International Conference INDIA 2016, Volume 1. Volume 2 and Volume 3 at ANITS, Visakhapatnam, member of editorial Board of the Proceedings published -Advances in Intelligent Systems and Computing(AISC), Springer Verlag, Switzerland Link: <https://books.google.co.in/books?isbn=3319120123>, 2016..
- 9th International Conference on Advanced Computing & Communication Technologies' [9th ICACCT 2015], Asia Pacific Institute of Information Technology, Panipat on 27th-29th November , 2015 14 member of editorial Board of the Proceedings published -Advances in Intelligent Systems and Computing(AISC), Springer Verlag, Switzerland Link: <https://books.google.co.in/books?isbn=3319120123>, 2015.
- International Conference on Frontiers of Intelligent Computing: Theory and Applications (FICTA) 2015, 14-16 November,2015 at National Institute of Technology, Durgapur member of editorial Board of the Proceedings published -Advances in Intelligent Systems and Computing(AISC), Springer Verlag, Switzerland Link: <https://books.google.co.in/books?isbn=3319120123>, 2015.
- Second International Conference on Computer and Communication Technologies, IC3T, 2015, CMR Technical Campus, Hyderabad, 24-26 July 2015, member of Editorial Board of the proceedings Published Advances in Intelligent Systems and Computing(AISC 379,380,381), Springer Verlag, Switzerland, Vol 1, Vol 2, Vol 3.
- International Conference on Frontiers of Intelligent Computing: Theory and Applications (FICTA) 2014, 14-15 November,2014 at Bhubaneswar Engineering College, Bhubaneswar member of editorial Board of the Proceedings published -Advances in Intelligent Systems and Computing(AISC), Springer Verlag, Switzerland Link: <https://books.google.co.in/books?isbn=3319120123>, 2014.
- Computational Intelligence in Data Mining (Published by Springer Volume 1 & 2), ICCIDM, Department of Computer Science and Engineering, Veer Surendra Sai University of Technology (VSSUT), Burla, Sambalpur – 768018, Odisha, India, 20-21 December 2014, **Smart Innovation, Systems and Technologies, Springer** as Program Co-Chair & Editor. Link: Volume I: <http://link.springer.com/book/10.1007/978-81-322-2205-7> Volume II: <http://link.springer.com/book/10.1007/978-81-322-2208-8> Volume III: <http://link.springer.com/book/10.1007/978-81-322-2202-6>, 2014
- Emerging ICT for Bridging the Future - Proceedings of the 49th Annual Convention of the Computer Society of India CSI Volume 1 & 2, CSI 2014, 14-16 December, 2014 at JNTU Hyderabad as Program Chair and member of Editorial Board of the Proceedings to be published -**Advances in Intelligent Systems and Computing(AISC), Springer Verlag**, Switzerland. Link: <https://books.google.co.in/books?isbn=331913728X>, 2014
- Information Systems Design and Intelligent Applications Proceedings of Second International Conference INDIA 2015, Volume 1 and Volume 2, Smart Innovation, Systems and Technologies, Springer, as Program Chair, Publication Chair,8-9 January,2015, Kalyani University Vol 1: <http://link.springer.com/book/10.1007/978-81-322-2250-7>; Vol 2: <http://link.springer.com/book/10.1007/978-81-322-2247-7>., 2014
- Guest Editor of 'Microsystem Technologies of Springer', publishing special issue from extended version of "2nd International conference on 'Microelectronics, Circuits and Systems", Micro-2015.
- Guest Editor of 'Microsystem Technologies of Springer', publishing special issue from extended version of "1st International conference on 'Microelectronics, Circuits and Systems", Micro-2014 from 11th to 13th July in Hotel Hayat, Kolkata, India. 2014.
- The Institution of Electronics and Telecommunication Engineers, Kolkata Center organized two days Zonal Seminar on ICT in Present Wireless Revolution: Challenges and Issues, 30-31st August, 2013, as Program Chair and Editor of the Proceedings with ISBN No. 978-93-5126-699-0., 2013.
- Two days International Conference on Computational Intelligence: Modeling, Technique and Applications Department of Computer Science & Engineering, Kalyani University, Kolkata organized two days International Conference on Computational Intelligence: Modeling, Technique and Applications, 27-28th September, 2013, as Program Chair Coordinator and Editor of the Proceedings ELSEVIER, Science Direct has published the proceedings of CIMTA - 2013 which is available on: <http://www.sciencedirect.com/science/journal/22120173/10>, 2013.
- Guest Editor of CSI Journal of Computing, Vol. 2, No. 1: <http://www.csi-india.org/journal-of-computing> (<http://www.csijournal.org/luitdox-saas/publications/Editorial-2-1-57-57.pdf>), 2013.
- Chief Editor, Advanced Computing : An International Journal, ISSN:2229-6727[online]; 2229-726X[print] of AIRCC.
- Chief Editor, Proceedings of International Conference on "Intelligent Infrastructure" under CSI-2012(www.csi-2012.org) organized by CSI on the eve of CSI Annual Convention, 2012.
- Chief Editor, Proceedings of ETCS 2012, organized by Dept. of CSE, Rastraguru Surendranath College, Barrackpur, February 2012.
- Chief Editor, Proceedings of NIDS-98 of CSI organized by CSI Siliguri Chapter, CSI Networking Division at Darjeeling Gimkhana Club 1998.
- Chief Editor, Proceedings of ERC-95, Organized by CSI Siliguri Chapter.