CURRICULUM VITAE OF DR. ARINDAM SARKAR



Full Name **Dr. Arindam Sarkar**

Designation Head of the Department (HoD) and Assistant Professor of Department of Computer Sc. & Electronics

Institution Ramakrishna Mission Vidyamandira, Belur Math-711202, Howrah, West Bengal, India.

(A Residential Autonomous College affiliated to Calcutta University, Under Department of Higher Education, Government of West Bengal College with Potential for Excellence (Phase-3), Re-accredited by NAAC with Grade 'A++' (CGPA:3.58); DBT STAR College; NIRF 9th Ranked in College category); Phone No. (033) 2654-9181 / 9632;

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Nationality Indian

Father's Name: Mr. Apurba Kumar Sarkar

Mother's Name: Mrs. Kaberi Sarkar

Date of Birth 22.03.1985

Gender Male

Telephone (+91)-8240007574 / (+91)-9851700660

Email <u>arindamsarkar@vidyamandira.ac.in/arindam.vb@gmail.com</u>
Website <u>http://vidyamandira.ac.in/pdfs/facultycv/Arindam_Sarkar_CV.pdf</u>

https://orcid.org/0000-0002-4951-4729

Total Publications

Correspondence Department of Computer Science and Electronics, Ramakrishna Mission Vidyamandira,

Address Belur Math-711202, Howrah, West Bengal, India.

Permanent Address Arovil Pally, Sadhanpur, Burdwan-713101, Purba Barddhaman, West Bengal, India.

ACADEMIC INFORMATION

DEGREE AWARDED/ EXAMINATION PASSED	YEAR OF PASSING	INSTITUTE/ UNIVERSITY/BOARD	DIVISION / CLASS
The West Bengal College Service Commission Examination (ADVT NO. 1/2015), Computer Science stream	2016	The West Bengal College Service Commission	SECOND RANK HOLDER
Ph.D (Engineering) UNDER DEPT. OF SCIENCE & TECHNOLOGY (DST), NEW DELHI, INSPIRE FELLOWSHIP SCHEME Specialization: Computer Science & Engineering	09/07/2015	UNIVERSITY OF KALYANI	Ex. Senior Inspire Fellow IF 120204
Master Degree: M.TECH (Computer Science & Engineering)	2011	UNIVERSITY OF KALYANI	University First Class First Rank Holder
Master Degree: M.C.A (Master of Computer Application)	2008	VISVA BHARATI, SANTINIKETAN	University First Class First Rank Holder With Distinction
Graduation Degree: B.C.A (HONS.) (Bachelor of Computer Application)	2005	THE UNIVERSITY OF BURDWAN	University First Class Tenth Rank Holder
Higher Secondary (10+2) Madhyamik (10)	2002 2000	W.B.C.H.S.E. W.B.B.S.E.	FIRST DIVISION FIRST DIVISION

GRADUATE APTITUDE TEST IN ENGINEERING (GATE) QUALIFIED

30.11.2011-09.07.2015	Ph.D. in Computer Science & Engineering, University of Kalyani, India, under
	Innovation in Science Pursuit for Inspired Research (INSPIRE) Fellowship Scheme sponsored and
	managed by Department of Science & Technology, New Delhi, India. INSPIRE is an innovative
	programme for attraction of talent to science.
13.07.2009–27.06.2011	M. TECH in Computer Science & Engineering, University of Kalyani, West Bengal, India.
	(University First Class First Rank Holder)
01.09.2005-21.09.2008	Master of Computer Application (MCA), VISVA-BHARATI, Santiniketan, West Bengal, India.
	(University First Class First Rank Holder)
10.07.2002-30.06.2005	Bachelor of Computer Application (BCA), The University of Burdwan, West Bengal, India

01.07.2000–02.07.2002 Higher Secondary Examination (10+2), West Bengal Council of Higher Secondary Education,

01.07.1999–27.06.2000 Secondary Examination (10), West Bengal Board of Secondary Education, India

(University First Class Tenth Rank Holder)

RESEARCH EXPERIENCE

- ❖ Ex. Innovation in Science Pursuit for Inspired Research (INSPIRE) Fellow (Senior Research Fellow-Professional) of Department of Science & Technology (DST), Govt. of INDIA in Computer Science & Engineering stream at Department of Computer Science & Engineering, University of Kalyani, Kalyani-741235, Nadia, West Bengal, India from 30.11.2011 to 09.07.2015.
- Ph.D. Thesis entitled "Towards Design and Implementation of Soft Computing based Cryptographic Techniques for Wireless Communication" under the supervision of Prof. (Dr.) J. K. Mandal, Department of Computer Science and Engineering, Faculty of Engineering, Technology and Management, University of Kalyani, Kalyani-741235, Nadia, West Bengal, India awarded on 09.07.2015 by the University.

Ph.D. JOINT-SUPERVISION / MENTORING

- 1. Serving as a Ph.D. Co-supervisor of Topic: "Machine learning approach for detection of attacks in wireless sensor networks", Institute: Computer Science and Engineering, North Eastern Regional Institute of Science and technology (NERIST), Arunachal Pradesh, Nirjuli, Arunachal Pradesh 791109.
- 2. Serving as a Ph.D. Co-supervisor of Topic: "Federated Learning based Healthcare Analytics", Institute: Department of Computer Engineering, Mizoram University (A Central University), Aizawl-796004

PROJECT SUPERVISION (M.C.A/ M.Sc./ BSc.)

Total number of M.Tech in Computer Science and Engineering Project Supervision: 05

Total number of Master of Computer Application (MCA) Project Supervision: 04

Total number of Master in Computer Science (MSc. Computer Science) Project Supervision: 10

Total number of Bachelor of Computer Application (BCA) Project Supervision: 30

Total number of Bachelore in Computer Science (BSc. Computer Science) Project Supervision: 36

RESEARCH COLLABORATION

- 1. National Centre for Computer Animation, Bournemouth University, Fern Barrow, Poole, Dorset, BH12 5BB, UK
- 2. School of Public Health & Management, Wenzhou Medical University, Wenzhou, Zhejiang 325035, China
- 3. School of Computer and Information, Oiannan Normal University for Nationalities, Guizhou, China
- 4. State Key Laboratory of Public Big Data, Guizhou University, Guizhou Guiyang, 550025, China
- 5. Department of Nuclear and Renewable Energy, Ural Federal University Named After the First President of Russia, Boris Yeltsin, 19 Mira Street, Ekaterinburg, 620002, Russia
- 6. World-Class Research Center "Advanced Digital Technologies", State Marine Technical University, Saint Petersburg, 190121, Russia
- 7. Faculty of Computing, Universiti Teknologi Malaysia (UTM), UTM Skudai, Johor Bahru, 81310, Johor, Malaysia
- 8. Department of Computer Science and Information, Taibah University, Medina 42353, Saudi Arabia
- 9. College of Computer Science and Engineering, Taibah University, Medina 42353, Saudi Arabia
- 10. Security Engineering Lab, CCIS, Prince Sultan University, Riyadh 12435, Saudi Arabia
- 11. Robotics and Internet-of-Things Laboratory, Prince Sultan University, Riyadh 12435, Saudi Arabia
- 12. Electrical Engineering Department Umm Al-Qura University Mecca, Saudi Arabia
- 13. Department of Computer Science and Engineering, North Eastern Regional Institute of Science and technology (NERIST), Arunachal Pradesh, Nirjuli, Arunachal Pradesh 791109, India
- 14. Department of Computer Engineering, Mizoram University (A Central University), Aizawl, Mizoram, India
- 15. Department of Information Technology, Jadavpur University, Kolkata, WB, India
- 16. Department of Computer Science, Sidho-Kanho-Birsha University, Purulia-723104, WB, India
- 17. Department of Computer Science & Engineering, University of Kalyani, Kalyani-741235, Nadia, WB, India
- 18. Department of Computer Science, MUC Women's College, The University of Burdwan, Burdwan-713104, WB, India
- 19. Institute of Neurosciences, Kolkata, 185, Acharya Jagadish Chandra Bose Rd, Kolkata-700017, WB, India
- 20. Department of Computer Science, Sarsuna College, The University of Calcutta, Kolkata-700061, WB, India

FUNDING RECEIVED FOR MAJOR PROJECT (RESEARCH & DEVELOPMENT PROJECT) TAKEN UP AS A CO-PRINCIPAL INVESTIGATOR

* Title of the project: Estimation & Mapping of concentration of contaminants in drinking water by cost effective and wireless portable device. *Sponsored by* Government of West Bengal Department of Higher Education, Science & Technology and Biotechnology (Science & Technology Branch and Biotechnology Branch) Vigyan Chetana Bhavan Dd-26/B, Sector I, Salt Lake, Kolkata-700064, West Bengal, India.

GRANTED PATENT(S)

2021

A process for the estimation of Arsenic (III) in drinking water using a wireless portable device, Uttam Kumar Ghorai, Angshuman Santra, Biswajit Ghorai, Arindam Sarkar, Debmalya Santra, Ujiwal Maulik (Under Process)

Member of Different Committee

1. Members of the Board of Studies (BoS) of Computer Application of Sidho-Kanho-Birsha University, Purulia, Wb, India for framing of new Curriculum and Credit Framework for Under Graduate Programmes (CCFUP) as recommended by NEP 2020.

Popular Writing in Leading News Paper

- 6. Embracing The changes: ChatGPT-4 and Generative AI., published in millenniumpost news paper Delhi, Kolkata, Siliguri editions on 14.06.23
- 5. Shield against Sextortion, published in millenniumpost news paper Delhi, Kolkata, Siliguri editions on 26.05.23
- 4. Predatory Creditors: Instant Loan app frauds, published in millenniumpost news paper Delhi, Kolkata, Siliguri editions on 10.05.23
- 3. The deception game: ChatGPT4, Deepfakes and social engineering, published in millenniumpost news paper Delhi, Kolkata, Siliguri editions on 19.04.23
- 2. ChatGPT5 is on track to attain artificial general intelligence, published in The Statesman news paper Delhi, Kolkata, Siliguri editions on 12.04.23
- 1. Infested with scammers: social media advertising of fraudulent shopping platforms, published in millenniumpost news paper Delhi, Kolkata, Siliguri editions on 31.03.23

PUBLICATIONS

Google Scholar



Dr. Arindam Sarkar Ramakrishna Mission Vidyamandira, Belur Math-711202, Howrah, WB, India Verified email at vidyamandira.ac.in Neural Cryptography GAN Cryptography Deep Learning Machine Learning Soft Computing

TITLE	CITED BY	YEAR
Neural session key exchange in the Industrial Internet of Things using hyperchaotic-guided vector-valued artificial neural synchronization T Hai, A Sarkar, R Karmakar, MZ Khan, A Noor, TH Noor, A Kumar, Engineering Applications of Artificial Intelligence 125, 106683		2023
Memristive hyperchaotic system-based complex-valued artificial neural synchronization for secured communication in Industrial Internet of Things MZ Khan, A Sarkar, A Noorwali Engineering Applications of Artificial Intelligence 123, 106357	1	2023
An efficient group synchronization of chaos-tuned neural networks for exchange of common secret key A Sarkar, K Daripa, MZ Khan, A Noorwali Soft Computing, 1-21		2023
Generative adversarial network-based efficient synchronization of group of neural networks to exchange the neural key A Sarkar Journal of Ambient Intelligence and Humanized Computing 14 (6), 6463-6488		2023
A symmetric neural cryptographic key generation scheme for lot security A Sarkar Applied Intelligence 53 (8), 9344-9367	2	2023

https://scholar.google.com/citations?user=SRHCThsAAAAJ&hl=en

https://www.scopus.com/authid/detail.uri?authorId=24578195200

https://orcid.org/0000-0002-4951-4729

I	MONOGRAPHS (BOOKS) PUBLISHED BY INTERNATIONAL PUBLISHER (GERMANY)								
S. No	Author(s)	Title	Name of Publisher	ISBN	Year				
	Sarkar, A.,	Artificial Neural Network	LAP LAMBERT	ISBN-10;					
	Mandal, J.K.	Guided Secured Communication	Academic Publishing	3659119911,	2012				
132		Techniques: A Practical	Germany	ISBN-13:					
		Approach		978-3659119910					
	Sarkar, A.,	Soft Computing Guided Faster	LAP LAMBERT	ISBN-10:					
131	Mandal, J.K.	Exponentiation Techniques: A	Academic Publishing	3659306762,	2012				
		Practical Approach	Germany	ISBN-13:					
			,	978-3659306761					

PUBLICATION IN SCIENCE CITATION INDEX (SCI) AND SCOPUS INDEXED PEER REVIEWED INTERNATIONAL JOURNAL

S. No	Author(s)	Title	Name of Journal	Volume	Page	Year
130	Hai, T., Sarkar, A., Karmakar, R., Khan, Mohammad, Z., Noor, A., Noor, T.H., Kumar, A., Yvaz, A.	Neural Session Key Exchange in the Industrial Internet of Things Using Hyperchaotic-guided Vector- Valued Artificial Neural Synchronization	Engineering Applications of Artificial Intelligence, Elsevier, ISSN 0952- 1976. Impact Factor (IF): 8	Accepted		2023 SCI, SCOPUS
129	Khan, Mohammad, Z., Sarkar, A., Noorwali, A.	Memristive Hyperchaotic System- based Complex-valued Artificial Neural Synchronization for Secured Communication in Industrial Internet of Things	Engineering Applications of Artificial Intelligence, Elsevier, ISSN 0952- 1976. Impact Factor (IF):	Accepted		2023 SCI, SCOPUS
128	Sarkar, A., Daripa, K., Khan, Mohammad Z., Noorwali, A.	An Efficient Group Synchronization of Chaos tuned Neural Networks for Exchange of Common Secret Key	Soft Computing, Springer ISSN 1433- 7479. Impact Factor (IF): 3.732	Accepted		2023 SCI, SCOPUS
127	Sarkar, A., Karmakar, R., Das, M.	GAN-guided Artificial Neural Collaborative Complex Computation for Efficient Neural Synchronization	Multimedia Tools and Applications, Springer -ISSN 14337479. Impact Factor (IF): 2.577	Accepted		2023 SCI, SCOPUS
126	Sharma, H., sarkar, A., Singh, M. M.	An Efficient Deep Learning-based Solution for Network Intrusion Detection in Wireless Sensor Network	International Journal of System Assurance Engineering and Management ISSN 0976-4348. Impact Factor (IF): 2	Accepted		2023 SCI, SCOPUS
125	Sarkar, A.	Gravitational Search-based Efficient Multilayer Artificial Neural Coordination	Neural Processing Letters, Springer. Impact Factor (IF): 2.565.	Accepted		2023 SCI, SCOPUS

124	Sarkar, A.	Neural Coordination Through Spider Monkey Optimization- guided Weight Synchronization	Multimedia Tools and Applications, Springer. Impact Factor (IF): 2.577.	Accepted		2023 SCI, SCOPUS
123	Prasad, A., Roy, S., Sarkar. A., Panja, S.C., Patra, S.N.	An Improved Prediction of Solar Cycle 25 Using Deep Learning Based Neural Network	Solar Physics, Elsevier. Impact Factor (IF): 2.961.	Accepted		2023 SCI, SCOPUS
122	Sarkar, A., Daripa, K., Khan, Mohammad Z., Noorwali, A.	Cloud Enabled Blockchain-based secured communication in Mutual Intelligent Transportation using Neural Synchronization https://doi.org/10.1016/j.vehcom.20 22.100533	Vehicular Communication, Elsevier. Impact Factor (IF): 8.373.	38	1-23	2022 SCI, SCOPUS
121	Sarkar, A.	A Symmetric Neural Cryptographic Key Generation Scheme for IoT Security	Applied Intelligence, Springer. Impact Factor (IF): 5.019. https://doi.org/10.1007/ s10489-022-03904-7			2022 SCI, SCOPUS
120	Sarkar, A., Khan, Mohammad Z., Alahmadi, A.	Mutual Learning based Group Synchronization of Neural Networks	Sadhana, Springer. https://doi.org/10.1007/ s12046-022-02010-1 Impact Factor (IF): 1.214.	47		2022 SCI, SCOPUS
119	Sarkar, A.	Development of GAN- based Optimal Neural Network Structure for Group Synchronization	Multimedia Tools and Applications, Springer. Impact Factor (IF): 2.577. https://doi.org/10.1007/ s11042-022-12601-z	81	28999 - 29025	2022 SCI, SCOPUS
118	Sarkar, A.	Mutual learning-based efficient synchronization of neural networks to exchange the neural key	Complex & Systems,	8	307- 321	2022 SCI, SCOPUS
117	Khan, Mohammad Z., Arindam Sarkar, Hamza Ghandorh, Maha Driss, and Wadii Boulila	Information Fusion in Autonomous Vehicle Using Artificial Neural Group Key Synchronization	Sensors, https://doi.org/10.3390/			

116	Sarkar, A. Sarkar, A.	Generative Adversarial Networks Based Neural Session Key Exchange Protocol for Secured Transmission of Information Faster Synchronization of Triple Layer Neural Network using Nature Inspired Whale Optimization: A Key Exchange Protocol	Wireless Personal Communications, Springer, https://doi.org/10.1007/s 11277-021-08997-w. Impact Factor (IF): 2.017 Wireless Personal Communications, Springer, https://doi.org/10.1007/ s 11277-021-09378-z Impact Factor (IF): 2.017	1124	683 - 713	2022 SCI, SCOPUS
114	Dey, J. Bhowmik, A., Sarkar, A., Karforma, S., Chowdhury, B.	Cryptographic Engineering on COVID- 19 Telemedicine: An Intelligent Transmission Through Recurrent Relation Based Session Key	Wireless Personal Communications, Springer. https://doi.org/10.1007/ s 11277-021-09045-3, Impact Factor (IF): 2.017	122	3167 - 3204	2022 SCI, SCOPUS
113	Sarkar, A.	Generative Adversarial Network- based Efficient Synchronization of Group of Neural Networks to Exchange the Neural Key	Journal of Ambient Intelligence and Humanized Computing, Springer, ISSN 1868- 5145, https://doi.org/10.1007/ s_12652-021-03521-1. Impact Factor (IF): 3.662,			2021 SCI, SCOPUS
112	Dey, J., Sarkar, A., Karforma, S., Chowdhury, B.	Metaheuristic secured transmission in Telecare Medical Information System (TMIS) in the face of post- COVID-19	Journal of Ambient			2021 SCI, SCOPUS
111	Sarkar, A., Khan, M.Z., Noorwali, A.	Secured Communication using Efficient Artificial Neural Synchronization	Engineering Applications of Artificial Intelligence, Elsevier, ISSN 0952- 1976. Impact Factor (IF): 7.802	106	1044 78	2021 SCI, SCOPUS
110	Sarkar, A.	Neural synchronization of optimal structure- based group of neural networks	Neurocomputing, Elsevier, ISSN 0925-2312, https://doi.org/10.1016/ j. neucom.2021.04.024. Impact Factor (IF): 5.779	450	156- 167	2021 SCI, SCOPUS

109	Sarkar, A., Khan, M.Z., Alahmadi, A.H.	Neural Weight Coordination- based Vector-Valued Neural Network Synchronization	Neurocomputing, Elsevier, ISSN 507-521, https://doi.org/10.1016/ j. neucom.2021.08.111. Impact Factor (IF): 5.779	464	507- 521	2021 SCI, SCOPUS
108	Sarkar, A.	Neural cryptography using optimal structure of neural networks	Applied Intelligence, Springer. https://doi.org/10.1007/ s 10489-021-02334-1. Impact Factor (IF): 5.019	51	8057 - 8066	2021 SCI, SCOPUS
107	Sarkar, A., M. Z. Khan, A. Noorwali	Chaos-guided Neural Key Coordination for Improving Security of Critical Energy Infrastructures	Complex & Intelligent Systems, Springer. https://doi.org/10.1007/ s_40747-021-00301-4. Impact Factor (IF): 6.700	7	2907 - 2922	2021 SCI, SCOPUS
106	Sarkar, A.	Generative adversarial network guided mutual learning based synchronization of cluster of neural networks	Complex & Intelligent Systems, Springer, https://doi.org/10.1007/ s 40747-021-00301-4. Impact Factor (IF): 6.700	7	1955 - 1969	2021 SCI, SCOPUS
105	Sarkar, A., M. Z. Khan, M. M. Singh, A. Noorwali, C. Chakraborty and S. K. Pani	Artificial Neural Synchronization Using Nature Inspired Whale Optimization	IEEE Access doi: 10.1109/ACCESS.202 1. 3052884. Impact Factor (IF): 4.076	9	1643 5- 1644 7	2021 SCI, SCOPUS
104	A. Sarkar, M. M. Singh, M. Z. Khan and O. H. Alhazmi	Nature-Inspired Gravitational Search- Guided Artificial Neural Key Exchange for IoT Security Enhancement	IEEE Access, doi: 10.1109/ACCESS.2021 .3082262. Impact Factor (IF): 4.076	9	7678 0- 7679 5	2021 SCI, SCOPUS
103	Nongmeikapam Brajabidhu Singh, Moirangthem Marjit Singh, Arindam Sarkar, Jyotsna Kumar Mandal	A novel wide & deep transfer learning stacked GRU framework for network intrusion detection	Journal of Information Security and Applications, Elsevier ISSN 2214-2126, https://doi.org/10.1016/jiisa.2021.102899. Impact Factor (IF): 4.96	61	1028 99	2021 SCI, SCOPUS
102	Sarkar, A., Khan,	CMOS technology- based energy	Computers & Electrical Engineering, Elsevier ISSN 0045-7906,	95	1073	2021

	M.Z., Alhamadi, A. H.	efficient artificial neural session key synchronization for securing IoT	https://doi.org/10.1016/ j. compeleceng.2021.107 3 69. Impact Factor (IF): 4.152		69	SCI, SCOPUS
101	Sarkar, A.	Deep Learning Guided Double Hidden Layer Neural Synchronization Through Mutual Learning	Neural Processing Letters, Springer https://doi.org/10.1007/ s 11063-021-10443-8. Impact Factor (IF): 2.565	53	1355 - 1384	2021 SCI, SCOPUS
100	Sarkar, A., Sarkar, M.	Tree parity machine guided patients' privileged based secure sharing of electronic medical record: cybersecurity for telehealth during COVID-19	Multimedia Tools and Applications, Springer, https://doi.org/10.1007/ s 11042-021-10705-6. Impact Factor (IF): 2.577	80	2189 9– 2192 3	2021 SCI, SCOPUS
99	Sarkar, A	Secure exchange of information using artificial intelligence and chaotic system guided neural synchronization	Multimedia Tools and Applications, Springer, https://doi.org/10.1007/s 11042-021-10554-3. Impact Factor (IF): 2.577	80	1821 1- 1824 1	2021 SCI, SCOPUS
98	Sarkar, A., Singh, M.M. & Mandal, J.K.	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 of Science and Engineering, Springer. https://doi.org/10.1007/ s 13369-020-05136-8, Impact Factor (IF): 2.807	46	3301 - 3317	2021 SCI, SCOPUS
97	Sarkar, A.	Chaos-Based Mutual Synchronization of Three-Layer Tree Parity Machine: A Session Key Exchange Protocol Over Public Channel	Arabian Journal of Science and Engineering, Springer, https://doi.org/10.1007/ s 13369-021-05387-z. Impact Factor (IF): 2.807	46	856 5– 8584	2021 SCI, SCOPUS
96	Amrita Prasad, Soumya Roy, Arindam Sarkar, Subhash Chandra Panja, Sankar Narayan Patra	Prediction of solar cycle 25 using deep learning based long short-term memory forecasting technique	Advances in Space Research, Elsevier, ISSN 0273-1177, https://doi.org/10.1016/j _ asr.2021.10.047. Impact Factor (IF): 2.611	69	798- 813	2022 SCI, SCOPUS
95	Sarkar, A.	Generative Adversarial Networks based Neural Session Key Exchange Protocol for Secured Transmission of Information	Wireless Personal Communications, Springer. https://doi.org/10.10 07/s11277-021- 08997-w Impact Factor (IF): 2.017			2022 SCI, SCOPUS

94	Sarkar, A., Dey, J. & Karforma, S.	Musically Modified Substitution-Box for Clinical Signals Ciphering in Wireless Telecare Medical Communicating Systems	Wireless Personal Communications, Springer. https://doi.org/10.1007/ s 11277-020-07894-y, Impact Factor (IF): 2.017	117	727 - 745	2021 SCI, SCOPUS
G N		TION IN PEER REVIEWE				X 7
S. No	Co-Author(s) Sarkar, A.,	Title A Supervised Machine Learning-	Name of Journal	Volume	Page	Year
93	Hanjabam Saratchandra	based Solution for Efficient Network Intrusion Detection Using Ensemble Learning Based on	International Journal of Information Technology, Springer			2022 SCOPUS
92	Dey, J., Karforma, S.	Newer post-COVID perspective: Teledental encryption by de- multiplexed perceptrons.	International Journal of Information Technology, Springer https://doi.org/10.100 7/s41870-020-00562-1	13	593– 601	2021 SCOPUS
91	Dey, J., Chowdhury,B., & Karforma, S.	Episode of COVID-19 Telepsychiatry Session Key Origination Upon Swarm- Based Metaheuristic and Neural Perceptron Blend.	SN Computer Science, Springer https://doi.org/10.100 7/s42979-021-00831-1	445	1-16	2021 SCOPUS
90	Dey, J., Karforma, S.	ICT-Guided Glycemic Information Sharing Through Artificial Neural Telecare Network.	SN Computer Science, Springer https://doi.org/10.100 7/s42979-021-00818- <u>Y</u>	426	1-14	2021 SCOPUS
89	Dey J., ChowdhuryB., Karforma S.	Patients' Data Security in Telemedicine Consultation in a "New Normal" Post COVID-19 Perspective	Journal of Mathematical Sciences & Computational Mathematics	2	422- 425	2021
88	Dey J., Mukherjee S., KarformaS.,	Post Covid-19 Bio-Imaging: Cancer Detection & Secured Procurement through DualNeurons Genetic Key (DNGK) in Advanced Medical Sciences	Journal of Mathematical Sciences & Computational Mathematics	2	478- 492	2021
87	Dey J., ChowdhuryB., Karforma S.	Secured Telepsychiatry for Geriatric Patients (TGP) in the Face of COVID-19 2nd Wave	Journal of Mathematical Sciences & Computational Mathematics	2	564- 571	2021
86	Dey J., Mondal S., Karforma SBhowmik A., Ferdows S. S.	New Normal Onset in Post- COVID Telemedicine Software Testing	International Research Journal of Modernization in Engineering Technologyand Science, e-ISSN:	2	409 – 416	2020

			2582-5208			
85	BhowmikA., KarformaS., Dey J.	A Way of Safeguard using Concept of Recurrence Relation and Fuzzy logic against Security Breach inWireless Communication	International Journal of Computer Science Engineering (IJCSE), ISSN: 2319-7323 10.21817/ijcsenet/202 0/v9i4/200904014	9	297- 311	2020
84	Bhowmik A., Karforma S., Dey, J.	A Defensive Approach Against Mathematical Cryptanalysis Using Symmetric Key and Fuzzy Based Session Key	Journal of Mathematical Sciences & Computational Mathematics, DOI: https://doi.org/10.15 864/jmscm.1303	1	272- 299	2020
83	Bhowmik A., Karforma S., Dey J.	A Key Generation technique using concept of Recurrence Relation and Fuzzy logic against Security Breach in Wireless Communication	EasyChair Preprint No. 3620			2020
82	Joydeep Dey, Anirban Bhowmik, Sk. Samim Ferdows	A Dynamic Key Generation Scheme based on Metaheuristic Cuckoo Search	International Journal of Computer Sciences and Engineering, ISSN 2347- 2693, IARC Impact Factor Value 3.802	7	184- 187	2019
81	Anirban Bhowmik, Sunil Karforma, Joydeep Dey	A Symmetric Key based Secret Data Sharing Scheme	International Journal of Computer Sciences and Engineering, ISSN 2347- 2693, IARC Impact Factor Value 3.802	7	188- 192	2019
80	Joydeep Dey, Sunil Karforma, Anirban Bhowmik	Metaheuristic Guided Secured Transmission of E-Prescription of Dental Disease	International Journal of Computer Sciences and Engineering, ISSN 2347- 2693, IARC Impact Factor Value 3.802	7	179- 183	2019
79	Bhowmik A., Karforma S., Dey J.	Linear Congruence and Chaos Theory: An Approach for Medical Data Security in IoT based Health Care System,	International Journal of Information Technology, Springer			2019
78	Dey J., Chatterjee M., Bhowmik A., Karforma S.	Neural Soft Computing based Secured Transmission of Intraoral Gingivitis Image in E- Health	Indonesian Journal of Electrical Engineering and Computer Science, Vol - 14(1), pp. 169- 177, April,2019. Print ISSN: 2502-4752, E	14	178- 184	2019

	T		TOOM			
			ISSN: 2502-4760,			
			UGC Journal No. 47077			
		Multilayer Neural Network				
		Synchronized Secured Session	Indonesian Journal			
77	Dey J., Bhowmik A.	Key based Encryption in	of Electrical	14	169-	2019
//		Wireless Communication	Engineering and	14	177	2017
			Computer Science		1//	
		Neural network synchronized				
		secured session key based	IAES International		45-53	
76		encryption in	Journal of Artificial	8	45-55	2019
		wireless communication,	Intelligence (IJ-AI),			
	Dey J., Bhowmik	Drivilaged Authoritieity in	ISSN: 2252-8938 IAES International			
	A., Karforma S.	Privileged Authenticity in Reconstruction of Digital	Journal of Artificial		175	
75	A., Karioinia 5.	Encrypted Shares,	Intelligence (IJ-AI),	8	175-	2019
		Enerypted Shares,	ISSN: 2252-8938		180	
		Computational Intelligence	IAES International			
74		based Lossless Regeneration	Journal of Artificial	o	197-	2019
/4		(CILR) of Blocked Gingivitis	Intelligence (IJ-AI),	8	204	
		Intraoral Image Transportation,	ISSN: 2252-8938		204	
	BhowmikA.,	700	Communications in			
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72	MandalJ.K.,	Encryption for Online Wireless	Journal of Applied	13	3637	2018
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71			Engineering Studies ,	4	67-69	2017
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69	J.K. Mandal	method in Wireless	Journal of Network	17	484-	
		Communication (CKE)	Security(IJNS)		493	
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		Computing based Cryptographic Technique using Ant Colony	International Journal of			
68	J.K. Mandal	Intelligence for Wireless	Computational	4	61.72	2014
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67		based Cryptographic	Journal of Ambient	2		
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66	J.K. Mandal	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)	4	85- 100	2014
65	J.K. Mandal	Secured Transmission Through Multi LayerPerceptron in Wireless Communication(STMLP)	International Journal of Mobile Network Communications & Telematics (IJMNCT)	4	1-16	2014
64	J.K. Mandal	Cryptanalysis of Key Exchange method using Computational Intelligence guided Multilayer Perceptron in Wireless Communication (CKEMLP)	Advanced Computational Intelligence: An International Journal (ACII)	1	1-9	2014
63	J.K. Mandal	Neuro Genetic Key Based Recursive Modulo-2 Substitution Using Mutated Character for Online Wireless Communication(NGKRMSMC)	International Journal of Computational Science and Information Technology (IJCSITY)	1	49-59	2013
62	J.K. Mandal	Genetic Algorithm Guided Key Generation in Wireless Communication (GAKG)	International Journal on Cybernetics & Informatics (IJCI)	2	9-17	2013
61	J.K. Mandal	Computational Intelligence Based Simulated Annealing Guided Key Generation In Wireless Communication (CISAKG)	International Journal on InformationTheory (IJIT)	2	35-44	2013
60	J.K. Mandal	Group Session Key exchange Multilayer Perceptron based Simulated Annealing guided Automata and Comparison based Metamorphosed Encryption in Wireless Communication (GSMLPSA)	International Journal of Wireless & MobileNetworks (IJWMN)	5	203- 222	2013
59	J.K. Mandal	Key Swap Over among Groupof Multilayer Perceptrons for Encryption in Wireless Communication (KSOGMLPE)	International Journal of Information Technology, Control and Automation (IJITCA)	3	85- 100	2013
58	J.K. Mandal	Key Generation and Certification using Multilayer Perceptron in Wireless Communication (KGCMLP)	International Journal of Security, Privacyand Trust Management (IJSPTM)	1	27-43	2013
57		Evolutionary Computation Guided Energy Efficient KeyOrganization	International Journal of	2	352-	

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56 J.K	K. Mandal	Energy Efficient Wireless Communication Using Genetic Algorithm Guided Faster Light Weight Digital Signature Algorithm (GADSA)	International Journal of Advanced SmartSensor Network Systems (IJASSN)	2	9-25	2012
55 J.K	K. Mandal	Multilayer Perceptron Guided Key Generation Through Mutation With Recursive Replacement In Wireless Communication (MLPKG)	International Journal on AdHoc Networking Systems (IJANS)	2	11-28	2012
54 J.K	X. Mandal	Swarm Intelligence basedFaster Public-Key Cryptography in Wireless Communication (SIFPKC)	International Journal of Computer Science& Engineering Technology (IJCSET)	3	267- 273	2012
53 J.K	K. Mandal	Secured Wireless Communication by High-Speed RSA Using Evolutionary Programming based Optimized Computation (HS-RSA-EP)	International Journal of Advanced Research in Computer Science (IJARCS)	3	161- 165	2012
• 7	a. Mandal, Karforma	Object Oriented Modelling of Idea Using GA Based Efficient Key Generation For E- Governance Security (OOMIG)	International Journal of Distributed and Parallel Systems (IJDPS)	3	171- 183	2012
BOOI	K CHAP	TERS PUBLISHED BY	INTERNATION	AL PUBI	LISH	ER

51	Sharma, H.S., Singh, M.M.	Machine Learning-Based DoS Attack Detection Techniques in Wireless Sensor Network: <i>A Review</i> . In: Kumar, A., Ghinea, G., Merugu, S., Hashimoto, T. (eds) Proceedings of the International Conference on Cognitive and Intelligent Computing. Cognitive Science and Technology.	Springer, Singapore. https://doi.org/10.1007/978-981-19- 2358-6 53 ISBN 978-981-19-2357-9	2023	
50	3	Deep Learning Architectures, Libraries and Frameworks in Healthcare, Editor: Sujata Dash, Subhendu Kumar Pani, Joel Rodrigues, Babita Majhi, Deep Learning, Machine Learning and	Taylor & Francis, CRC Press.	2022	

Title

IoT in Biomedical and Health

Linear Congruence Generator and

Chaos Based Encryption Key

Informatics

S. No

49

Co-Author(s)

Singh

Name of Publisher

Year

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	Bhowmik A., Karforma S., Dey J.	Generation for Medical Data Security in IoT Based HealthCare System. In: Dash S., Pani S.K., Abraham A., Liang Y. (eds) Advanced Soft Computing Techniques in Data Science, IoT and Cloud Computing. Studies in Big Data,	Springer, Cham, vol 89. https://doi.org/10.1007/978- 3-030- 75657-4_3	2021
48	Dey J., Karforma S.	Chapter 19 - Internet of Things e- health revolution: secured transmission of homeopathic e- medicines through chaotic key formation, Editor(s): Siddhartha Bhattacharyya, Paramartha Dutta, Debabrata Samanta, Anirban Mukherjee, Indrajit Pan, Recent Trends in Computational Intelligence Enabled Research	Academic Press, 2021, Pages317-337, ISBN 9780128228449	2021
47	Bhowmik A., Karforma S., Dey J.,	A Novel Approach in Communication Securityof Internet-of-Vehicles Using the Concept of Recurrence Relation and Symmetric Key. InGupta, N., Rodrigues, J.J.P.C., & Dauwels, J. (Eds.), Augmented Intelligence Toward Smart Vehicular Applications (1st ed.), Chapter 7	Taylor & Francis Group, CRC Press, ISBN 9781003006817, https://doi.org/10.1201/9781003006817.	2020
46	Bhowmik A., Karforma S., Dey, J.	A Novel Approach in Communication Security Congruence: A State-of-Art Approach in Information Security Issues Towards Internet of Vehicles. In: Gupta N., Prakash A., Tripathi R. (eds) Internet of Vehicles and its Applications in Autonomous Driving. Unmanned System Technologies.	Springer, Cham. https://doi.org/10.1007/978-3-030-46335-9-10	2020
45	Bhowmik A., Karforma S., Dey J.	Fuzzy-Based Session Key as Restorative Power of Symmetric Key Encryption for Secured Wireless Communication. In: Kundu S., Acharya U., De C., Mukherjee S. (eds) Proceedings of the 2nd International Conference on Communication, Devices and Computing. Lecture Notes in Electrical Engineering, vol 602.	Springer, Singapore, PrintISBN 978-981-15-0828-8, Online ISBN 978-981-15-0829-5, DOI https://doi.org/10.1007/978-981-15-0829-5_17	2020
44	Dey J., Karforma S.	Secured Session Key-Based E-Health: Biometric Blended with Salp Swarm Protocol in Telecare Portals. In: Mandal J., Mukhopadhyay S. (eds) Proceedings of the Global AI	Springer, Singapore. https://doi.org/10.1007/978- 981-15- 2188-1_56	2020

		Congress 2019. Advances in Intelligent Systems and Computing, vol 1112.		
43	Dey J., Bhowmik A.,Mandal J.K., Karforma S.	Computational Intelligence Based Neural Session Key Generation on E-Health Systemfor Ischemic Heart Disease Information Sharing Advances in Intelligent Systems andComputing, vol 812.	Springer, Singapore, DOI: https://doi.org/10.1007/978- 981-13- 1540-4_3, PrintISBN 978-981-13-1539-8, Online ISBN 978-981-13- 1540-4	2019
42	J.K. Mandal	Particle Swarm Optimization based Session Key Generation for Wireless Communication (PSOSKG)	IGI GLOBAL Handbook of Research on Swarm Intelligence in Engineering, chapter 20, DOI:10.4018/978-1-4666- 8291-7. Thomson Reuters (BookCitation Index – ISI Web of Science)701 E. Chocolate Ave., Hershey, Pennsylvania (USA): IGI GLOBAL	2014
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41	Dey J, Bhowmik A., Karforma S.	Modified Nature-Inspired Salp Swarm Computational Key Generation for OnlineBiometric Telemedicine Portals	4 th Regional Science & Technology & Congress(Western Region),The University of Burdwan, pp 163.	2019
40	Dey J., Ferdows S. S., Bhowmik A., Karforma S.	Chaotic Artificial Bee Colony Guided Transmission of E- prescriptions through Neural Computing	4 th Regional Science & Technology & Congress(Western Region), The University of Burdwan, pp 157.	2019
39	Ahmad S., Dey J., Barman K. C.	Telecare Mental E-Treatment: Symmetric Key Guided Online Secured Transmission ofHomeopathic E-prescription	4th Regional Science & Technology & Congress(Western Region), The University of Burdwan, pp 330.	2019
38	Sinha S., Dey J., Ahmad S.	Music Therapy at Online Stress ManagementInteractive Portal,	4 th Regional Science & Technology & Congress(Western Region),The University of Burdwan, pp 204.	2019
37	Dey J., Bhowmik A.,Ahir N., Datta A., Sinha S., Mondal P.	Key Robustness Analysis Under Current Trendsin Cryptanalysis,	In the proceedings of 3 rd Regional Science & Technology Congress(SR), 2018, Bidhan Nagar College, Salt Lake, pp. 149, Dept. of Science and Technology and Biotechnology, Govt. of WestBengal.	2018
36	Mondal P., Dey J., Bhowmik A., Sinha S., Ahir N.	Innovative Mapping of Probablistic Fuzzy intoMerge Sort Algorithm	In the proceedings of 3 rd Regional Science & Technology Congress(SR), 2018, Bidhan Nagar College, Salt Lake, pp. 148, Dept. of Science and Technology and Biotechnology, Govt. of WestBengal.	2018

35	Dey J., Bhowmik A.	CryptographicBit-Clustering TransmissionProtocol for Computer Vision Syndrome	In the proceedings of 3 rd Regional Science & Technology Congress(SR), 2018, Bidhan Nagar College, Salt Lake, pp. 129, Dept. of Science and Technology and Biotechnology, Govt. of WestBengal.	2018
34	Bhowmik A., Dey J.,Ferdows S Sk.	Ciphered Object Oriented Approach towardsMathematical Problem Solving in Online Transactions	In the proceedings of 3 rd Regional Science & Technology Congress(SR), 2018, Bidhan Nagar College, Salt Lake, pp. 161, Dept. of Science and Technology and Biotechnology, Govt. of WestBengal.	2018
33	Bhowmik A., Dey J.	An Approach on Data Security with theCombination of Symmetric and Asymmetric Key Encryption	In the proceedings of 3 rd Regional Science & Technology Congress(SR), 2018, Bidhan Nagar College, Salt Lake, pp. 133, Dept. of Science and Technology and Biotechnology, Govt. of WestBengal.	2018
32	Datta A., Dey J., Bhowmik	Digital Authentication Based on HomogeneousBlocks Length Fusion	In the proceedings of 3 rd Regional Science & Technology Congress(SR), 2018, Bidhan Nagar College, Salt Lake, pp. 127, Dept. of Science and Technology and Biotechnology, Govt. of WestBengal.	2018
31	Dey J., Bhowmik A.	Digital Transmission of Spectral TansmittanceCurve for Computer Vision Syndrome Disease	In the proceedings of National-Level Seminarentitled "Non CommunicableDisease and Its prevention: Challenge with Nutraceutical,Department of Nutrition, M.U.C Women's College, Burdwan, Feb. 2018, pp. 10.	2018
30	Dey J., Bhowmik A.,Karforma S.	A novel technique for secured transmission of intraoral image of Gingivitis disease	In the proceedings of 2 nd Regional Science & Technology Congress (WR), 2017, Burdwan University,pp. 207, Dept. of Science and Technology and Biotechnology, Govt. of WestBengal.	2017
29	Bhowmik A., Dey J.,Karforma S.	Implementation of security of multimediadocuments using RSA encryption and watermarking	In the proceedings of 2 nd Regional Science & Technology Congress (WR), 2017, Burdwan University,pp. 232, Dept. of Science and Technology and Biotechnology, WB	2017
			TIONAL CONFERRENCE	
S. No	Co-Author(s)	Title	Name of Conference	Page Year
28	Hanjabam Saratchandra Sharma, Moirangthem Marjit Singh,	Detection of Mirai and GAF-GYT attack in Wireless Sensor Network	International Conference on Intelligent Cyber Physical Systems and Internet of Things (ICoICI 2022), Springer	11-12 August, 2022
27	Mukherjee S.,Dey J.	A Novel Technique for Co-morbid Cancer Patients Through Artificial Neural Networks in COVID 19 Era	Biggest Threat To Human Civilization	18-19 July,2020.

			Netaji Mahavidyalaya, Hooghly		
			International Conference/IETE		
26	Dey, J., Karforma, S.	IOT E-Health Revolution: Secured Transmission of Homeopathic E- Medicines Through Chaotic Key Formation	ZonalSeminar/Student Convention on IOT in present Wireless Revolution (IOTWR-2020), Organized by The Institution of Telecommunication Engineers, Kolkata Centre		27 th June, 2020
25	Mukherjee,S., Dey, J.	Bio-Imaging Cancer: Detection & Secured Procurement in IoT GuidedHealth Sciences International Conference/IET ZonalSeminar/Student Conven on IOT in present Wireless Revolution (IOTWR-2020), Organized by The Institution Telecommunication Engineers, Kolkata Centre			27 th June, 2020
24		Secure IOT with the help of Blockchain	International Conference/IETE ZonalSeminar/Student Convention on IOT in present Wireless Revolution (IOTWR-2020), Organized by The Institution of Telecommunication Engineers, Kolkata Centre		27 th June, 2020
23	Dey, A., Manna, M.	Design and Implementation of Self Controlled Decision MakingData transmitting Robot Car	International Conference/IETE ZonalSeminar/Student Convention on IOT in present Wireless Revolution (IOTWR-2020), Organized by The Institution of Telecommunication Engineers, Kolkata Centre		27 th June, 2020
22	Mahalanabish,S., Manna, M.	Prototype for Microcontroller Enhanced Automatic Street Light Control System	International Conference/IETE ZonalSeminar/Student Convention on IOT in present Wireless Revolution (IOTWR-2020), Organized by The Institution of Telecommunication Engineers, Kolkata Centre		27 th June, 2020
21	Mandal, J. K., Bose, A., Halder, S.	Elliptic Curve Cryptosystem (ECC).	In Proceedings of the International Conference on Advances and Technology, pp. 187-190, ISBN 9781945919473 [Print]		March 17-19 2017
20	Joydeep Chongder	Cycle Formation and Hopfield Network based Key Tuning and Enciphering	In Proceedings of the Third International Conference on Computing and Systems (ICCS-2016)		January 21-22 2016
19	J.K. Mandal	Comparative Analysis of Tree parityMachine 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, ISBN: 978-3-319-13727-8 [Print], ISBN: 978-3-319-13728-5 [Online]	53-61	Dec 12-14 2014
18	J.K. Mandal, P. Mondal	Neuro-Key Generation Based on HEBB Network for Wireless Communication.	In Proceedings of the 3 rd InternationalConference on Frontiers of IntelligentComputing: Theory and applications (FICTA 2014), AISC Series SpringerVol. 328, Book Subtitle Vol.2, ISBN: 978-3-319-12011-9	197- 205	Nov 14-15 2014

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			[Print], ISBN: 978-3-319-12012-6 [Online], Series ISSN: 2194-5357		
17	J.K. Mandal, D. Dutta	Hopfield network based neural key generation for wireless communication.	In Proceedings of the 3 rd InternationalConference on Frontiers of IntelligentComputing: Theory and applications (FICTA 2014), AISC Series SpringerVol. 328, Book Subtitle Vol.2, ISBN: 978-3-319-12011-9 [Print], ISBN: 978-3-319-12012-6 [Online], Series ISSN: 2194-5357	217- 224	Nov 14-15 2014
16	M. Sengupta, J.K. Mandal	KSOFM Network Based Neural KeyGeneration for Wireless Communication.	In Proceedings of the 3 rd InternationalConference on Frontiers of IntelligentComputing: Theory and applications (FICTA 2014), AISC Series SpringerVol. 328, Book Subtitle Vol.2, ISBN: 978-3-319-12011-9 [Print], ISBN: 978-3-319-12012-6 [Online], Series ISSN: 2194-5357	207- 215	Nov 14-15 2014
15	J.K. Mandal	Complete Binary Tree Architecture based Triple Layer Perceptron Synchronized Group Session Key Exchange and Authentication in Wireless Communication (CBTLP).	In Proceedings of the 48th Annual	609-615	Dec 13-15 2013
14	J.K. Mandal, P. Patra	Double Layer Perceptron Synchronized Computational Intelligence guided Fractal Trianglebased Cryptographic Technique for Secured Communication (DLPFT).	In Proceedings of the IEEE 4 th International Symposium on Electronic System Design (ISED-2013), ISBN 978-0- 7695-5143-2	191- 195	Dec 13-15 2013
13	J.K. Mandal	Computational Intelligence based Triple Layer Perceptron Model Coordinated PSO guided Metamorphosed based Application inCryptographic Technique for SecuredCommunication (TLPPSO)	In Proceedings of the First International Conference on Computational Intelligence: Modeling, Techniques and Applications (CIMTA-2013), Vol.10, ISSN: 2212-0173	433- 442	Sept 27-28 2013
12	J.K. Mandal, A. Chowdhuri	Time Efficient Optimal Tuning through various Learning Rules in Unify Computing (TEOTLRUC).	In Proceedings of the First International Conference on Computational Intelligence: Modeling, Techniques and Applications (CIMTA-2013), Vol.10, ISSN: 2212- 0173	474- 481	Sept 27-28 2013
11	J.K. Mandal, A. Chowdhuri	Encryption Technique based on Neural Session Key (ETNSK).	In Proceedings of the Second International Conference on Computing And Systems, (ICCS 2013), Department of Computer Science, The University of Burdwan, ISBN 978-9-35-134273-1	29-33	Sept 27-28 2013
10	J.K. Mandal	Secured Wireless Communication Through Simulated Annealing Guided Triangularized Encryption ByMultilayer Perceptron Generated	In Proceedings of the Third International Conference on ComputerScience & Information Technology (CCSIT 2013), Computer Science & Information	217- 224	Feb 18-20

		Session Key (SATMLP).	Technology (CS & IT), ISBN: 978-1- 921987-00-7		2013
9	J.K. Mandal	An Adaptive Genetic Key Based Neural Encryption For Online Wireless Communication (AGKNE).	In Proceedings of the IEEE International Conference on Recent Trends In Information System (RETIS2011), ISBN 978-1-4577- 0791-9.	62-67	Dec 21-23 2011
8	J.K. Mandal	An Adaptive Neural Network GuidedSecret Key based Encryption throughRecursive Positional Modulo-2 Substitution for Online Wireless Communication (ANNRPMS)	In Proceedings of the IEEE International Conference on Recent Trends In Information Technology (ICRTIT 2011), ISBN 978-1-4577-0590- 8/11	107- 112	June 3-5 2011
7	J.K. Mandal	An Adaptive Neural Network GuidedRandom Block Length Based Cryptosystem (ANNRBLC).	In Proceedings of the IEEE International Conference on 2nd International Conference on Wireless Communications, Vehicular Technology, Information Theory AndAerospace & Electronic System Technology (WIRELESS VITAE 2011), Special Session: Security Protection Mechanism in Wireless Sensor Networks, ISBN 978-87-92329-61-5	1-5	Feb 28- March 03 2011
6	J.K. Mandal	Neural Network Guided Secret Key based Encryption through CascadingChaining of Recursive Positional Substitution of Prime Non- Prime (NNSKECC)	In Proceedings of the First International Conference on Computing And Systems (ICCS 2010), ISBN 93-80813- 01-5	291- 297	Nov 19-20 2010
	I	PUBLICATION IN NATIO	NAL CONFERRENCE		
5	Dey J., Bhowmik A.	Digital Transmission of Spectral Transmittance Curve for Computer Vision Syndrome Disease	In the proceedings of National Level Seminar entitled "Non Communicable Disease and Its prevention: Challenge with Nutraceutical"		Feb. 2018
4	J.K. Mandal	Nature Inspired Algorithm based Cryptographic Techniques	In Proceedings of the National Conference on Computing, Communication and Information Processing, (NCCCIP 2015), ISBN 978-93-84935-27-6.	158- 169	May 2-3 2015
3	J.K. Mandal	Neural Session Key based Traingularized Encryption for OnlineWireless Communication (NSKTE)	In Proceedings of the 2 nd National Conference on Computing and Systems, (NaCCS 2012), ISBN 978- 93-808131-8-9.	172- 177	March 15-16 2012
2	J.K. Mandal	Neural Weight Session Key based Encryption for Online Wireless Communication (NWSKE)	In Proceedings of the Research and Higher Education in Computer Scienceand Information Technology, (RHECSIT- 2012), ISBN 978-81-923820-0-5.	90-95	Feb 21-22 2012
1		Parallel Session Key Exchange and Certification by Fine Tuning of Double Layer Perceptron in Wirelesscommunication (PKECDLP)	In Proceedings of the ICT in Present Wireless Revolution: Challenges and Issues, The Institution of Electronics and Telecommunication Engineers Kolkata Centre, ISBN 978-93- 5126-699-0.	1-9	Aug 30-31 2013

EXAMPLES OF PARTICIPATION IN INDUSTRIAL INNOVATION

2021 -2022 Presently working on various Machine Intelligence aspects through Academic Interface Program (AIP), Tata Consultancy Service (TCS) Innovation Lab, Kolkata, West Bengal, India.

PRIZES AND AWARDS

2005	University First Class Tenth Rank Holder in Bachelor of Computer Application Programme at
	The University of Burdwan, Burdwan, West Bengal, India.
2008	University First Class First Rank Holder in Master of Computer Application Programme at
	VISVA-BHARATI University, Santiniketan, West Bengal, India,
2011	University First Class First Rank Holder in Master of Computer Science and Engineering Programme
	at
	University of Kalyani, Kalyani, Nadia, West Bengal, India.
2012	Innovation in Science Pursuit for Inspired Research (INSPIRE) Fellowship Scheme sponsored and
	managed by Department of Science & Technology, New Delhi, India. for pursuing Ph.D.
	7 1 2 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

PROFESSIONAL EXPERIENCE

18.11.2016-till date	Head of Department and Assistant Professor, Department of Computer Science and Electronics at Ramakrishna Mission Vidyamandira (DBT STAR College, A Residential
	Autonomous College under University of Calcutta with CPE status, NAAC A++ Grade (CGPA-3.58), NIRF 2022 Ranking in College Category: 9 th), Belur Math, Howrah-711202,
	West Bengal, India.
10.07.2015–17.11.2016	Former Visiting Faculty at The University of Burdwan, WB, India in M.Sc. (Computer
	Science) stream.
10.07. 2015–17.11.2016	Former Visiting Faculty at University of Kalyani, WB, India in M.Tech (Computer Science & Engineering) & MCA stream.
16.10.2015–17.11.2016	Former Visiting Faculty at Kalyani Govt. Engineering College (KGEC), WB, India in M.Tech (Information Technology) and B.Tech (Information Technology) stream.
10.07.2015–17.11.2016	Former Guest Lecturer at M.U.C. Women's College (a constituent college under The University of Burdwan, WB, India), Burdwan in B.Sc. (Computer Science Hons.) stream.
05.07.2011–29.09.2011	Served as a Guest Lecturer at M.U.C. Women's College (a constituent college under The
03.07.2011-29.09.2011	University of Burdwan, WB, India), Burdwan in B.Sc. (Computer Science Hons.) stream.
01.01.2011-30.06.2011	Served as a Guest Lecturer in B.Tech (Computer Science & Engineering) stream at "Swami
01.01.2011 30.00.2011	Vivekananda Institute of Science And Technology", a degree college affiliated by West
	Bengal University of Technology (WBUT), WB, India.
01.01.2011-30.06.2011	Served as a Guest Lecturer in B.C.A (Hons.) stream at "Chandannagar Institute of
	Management & Technology (CIMT)", a degree college affiliated by The University of
	Burdwan, WB, India.
13.07.2009–29.11.2011	Served as a Guest Lecturer in M.Sc (Computer Science) and M.C.A stream at The
	University of Burdwan WB, India.
13.07.2009–29.11.2011	Served as a Guest Lecturer in B.C.A (Hons.) stream at "Burdwan Institute of Management
	& Science (BIMS)", a degree college affiliated by The University of Burdwan, WB, India.
16.12.2008–12.07.2009	Served as a Full Time Faculty (Contractual) in M.C.A stream at "Department of Computer
00 00 0000 15 10 0000	Science", The University of Burdwan, WB, India.
08.09.2008–15.12.2008	Served as a Guest Lecturer in B.C.A (Hons.) stream at "Burdwan Institute of Management
16 10 0000 431 1-4-	& Science (BIMS)", a degree college affiliated by The University of Burdwan, WB, India.
16.12.2008–till date	Appointed as a Question Paper Setter, Moderator, Examiner, Reviewer of various subjects
	of MSCS, M.C.A, M.Sc. (Computer Science), B.C.A (Hons.), B.Sc. (Computer Science), Application In Business (Theory Part) Paper VI and practical for the B.Com Part III
	Honours stream by The University of Burdwan, WB, India.
2009	Appointed as an author of a study material of M.Sc. (Computer Science) stream by
_007	The University of Burdwan, WB, India.
2012	Acted as a Chairman of B.Sc. (Computer Science) General Part I Examination 2012 of
	The University of Burdwan, WB, India.

Acted as a Convener of B.C.A (Hons.), Part I And Part II Practical Examinations 2012

(B.C.A-209 & B.C.A-109) of The University of Burdwan, WB, India.

2016–till date Appointed as a Question Paper Setter of BSc Computer Science stream of

West Bengal State University, India.

2018—till date Appointed as a Question Paper Setter and Examiner of MCA stream of

Vidyasagar University, Midnapore, India.

2018–till date Appointed as a Question Paper Setter of B.Sc. and M.Sc. stream of West Bengal State

University and University of Kalyani, India.

2018–till date Appointed as a Question Paper Setter, Examineer of MSc Computer Science stream of

Sarsuna College, Calcutta University, India.

2019 Appointed as a Reviewer/ Editor of the self-learning material for distance education under

Director of distance Education, Vidyasagar University, West Bengal, India.

PRESIDED AS A SESSION CHAIR/ JURY MEMBER/ SESSION JUDGE

- 1. Acted as a Session Judge for Extempore competition on 18.12.2021 at Ramakrishna Mission Vidyamandira, Belur Math.
- **2.** Acted as a Session Judge for English recitation competition on 29.11.2021 at Ramakrishna Mission Vidyamandira, Belur Math.
- **3.** Acted as a Session chair at International Multidisciplinary Conference on Information Science, Management Research and Social Science (IMCISMRSS-21), which was held on 19th March,2021, organized by the Alpha Arts and Science College (NAAC Accredited, TUV Certified & The University of Madras affiliated institute), Chennai, India in association with the International Centre for Curriculum & Research Development (ICCRD), under the ambit of Crown University Int'l Chartered Inc (CUICI), Delaware; USA & Santacruz; Argentina.
- **4.** Acted as a Session chair a Technical Session in First International Conference on Innovations in Software Architecture and Computational Systems (ISACS-2021), held on 2nd and 3rd April, 2021.
- **5.** Acted as a Rapporteur, 1st International Conference on Computational Intelligence and Computing ICCIC2020ne.
- **6.** Acted as Session judge at International Conference/IETE Zonal Seminar/Student Convention on IOT in present Wireless Revolution (IOTWR-2020), Organized by The Institution of Electronics and Telecommunication Engineers, Kolkata Centre on 27th June, 2020.
- 7. Session Chair in a State-Level Science Seminar on "Artificial Intelligence on Social Engineering, Health Care & Data Analysis" Kishorekona N.A.Vidyalaya (Govt. Sponsored Higher Secondary School), Galsi Block-II, Khana Junction, Purba Bardhaman-713141 on 2nd March, 2020.
- **8.** Session Co-chaired at the Technical Session at State-Level Seminar entitled "Nature Inspired Biological Computations (NIBC-2019), organized by the Department of Computer Science, M.U.C. Women's College (a constituent college under The University of Burdwan, WB, India), Burdwan on 28.02.2019.
- **9.** Served as a Jury member panel at the Poster Competition on "Mathematics For All" by observing National Mathematics Day (NMD-2018), organized by the Department of Computer Science, in collaboration with the Department of Mathematics, M.U.C Women's College, sponsored by DST & Biotechnology, Govt. of WB at M.U.C. Women's College, Burdwan on 19.03.2019.

INVITED PRESENTATIONS TO INTERNATIONALLY ESTABLISHED CONFERENCES AND/OR INTERNATIONAL ADVANCED SCHOOLS

- 10.05.2023 Invited keynote lecture "Play with Python" organized by the Sidho-Kanho-Birsha University, India.
- 30.01.2023 Invited lecture "Are We Smart Enough to Use the Smart Gadgets? Cyber Security in a Hyper Digitized Post Pandemic Smart Society" in the Training Programme on "Methodology of Teaching ICT" for the in-service school teachers held at Ramakrishna Mission Sikshanamandira, A NCTE recognized Govt. Aided (WB) Autonomous Post-Graduate College under University of Calcutta, College of Teacher Education (CTE), Belur Math, Howrah-711202.
- 23.12.2022 Invited keynote lecture "Federated Learning and Cyber Security in an Ultra Digitized Post Pandemic Smart Society" organized by the Vidyasagar College, Kolkata, West Bengal, India in celebration of Pundit Iswarchandra Vidyasagar's Bicentennial Birth Anniversary.
- 14.12.2022 Invited keynote lecture "Big Data Analytics and It's Applications" organized by the Career Counselling & Training Programme, Asutosh College, Kolkata 26, West Bengal, India.
- 21.11.2022 Invited keynote lecture "Federated Learning in Digital Healthcare" organized by the Sidho-Kanho-Birsha University, India.
- 29.07.2022 Invited lecture "Machine Learning using python" organized by the MUC Women's College, India.
- 22.07.2022 Invited lecture "Cybersecurity" organized by the MUC Women's College, India.
- 11.06.2022 Invited lecture" Deep Learning and neural Networks" organized by the MUC Women's College, India.
- 25.05.2022 Invited lecture "Federated Learning" organized by the MUC Women's College, India.

- 12.02.2022 Invited lecture "Big Data Analytics" organized by the Career Counselling & Training Programme, Asutosh College, Kolkata 26, West Bengal, India.
- 30.07.2021 Invited lecture "Machine Learning and Cybersecurity: Challenges and solutions in a hyperdigital post-pandemic society" organized by the Institute of Leadership Entrepreneurship & Development, Kolkata, West Bengal, India.
- 05.09.2020 Invited lecture "Cybersecurity: Challenges and solutions in a post-pandemic hyper-digital world" organized by the Department of Computer Science, Economics, and Internal Quality AssuranceCell, Gourmohan Sachin Mondal Mahavidyalaya, University of Calcutta, Madhabpur, West Bengal, India.
- 04.07.2020 Invited lecture "Cybersecurity: Threats, Challenges, and Solutions in the age of Social Engineering" at the web lecture series (Session I) on "E-learning, Online Teaching, and Electronic Devices: Practical Approaches" organized by the Central Library, Department of English and Internal Quality Assurance Cell, DR. B.R. Ambedkar College, University of Kalyani, Betai, Nadia, WB, India.
- 02.03.2020 Invited lecture "Security threats and issues in Social Engineering" as a Keynote Speaker ina State-Level Science Seminar on "Artificial Intelligence on Social Engineering, Health Care & Data Analysis" Kishorekona N.A.Vidyalaya (Govt. Sponsored Higher Secondary School), Galsi Block-II, Khana Junction, Purba Bardhaman, India.
- 23.01.2020 Invited lecture "Security threats and issues in Social Engineering" at 3-day District Level Residential Science Education Camp, organized by the Department of Computer Science financially supported by Department of Science & Technology& Biotechnology, Govt. of W.B. at M.U.C. Women's College, India.
- 23.11.2019 Invited lecture entitled "West Bengal Health Scheme" as a Keynote Speaker at State-Level Seminar organized by the IQAC, Vivekananda Mahavidalaya, Haripal, Hooghly, India.
- 28.02.2019 Invited lecture entitled "A Stochastic Simulation of Artificial Bee Colony Algorithm based Optimization" as a Keynote Speaker at State-Level Seminar entitled "Nature Inspired Biological Computations (NIBC-2019), organized by the Department of Computer Science, M.U.C. Women's College, India by observing National Science Day.
- 06.06.2018 Invited lecture at Orientation Programme on "Office Automation" entitled "Security in Smart Gadgets" at M.U.C. Women's College, organized by the Department of Computer Science, M.U.C. Women's College, India.
- 04.06.2018 Invited lecture on "Soft Skills Enhancement" at M.U.C. Women's College on, organized by the Department of Computer Science, M.U.C. Women's College, India.
- 23.02.2018 Invited lecture as a Resource Person at Faculty Development Programme entitled "Soft Skills Enhancementon Vernacular Documentation" at M.U.C. Women's College, Burdwan, India, organized by the Department of Computer Science, M.U.C. Women's College, India.
- 18.09.2017 Invited lecture on "Design and Analysis of problem using Object Oriented Paradigm" as a Speaker in one day seminar on "Problem Solving through Object Oriented Analysis and Design", organized by the Department of Computer Science, M.U.C. Women's College, India.
- 21.04.2017 Invited lecture as a Speaker in one day workshop on "ICT based E-Secured Application Software" entitled "Internet Security Threats and Solutions", organized by the Department of Computer Science, M.U.C. Women's College, India.
- 2017-2019 Theory and Practical classes taken for B.Sc. [Physics (Hons.)] Semester 1 CBCS and B.A [Physical Education (Gen)] III rd Year at M.U.C Women's College during academic session 2017-18 & 2018-19.

APPOINTED AS A PROGRAM COMMITTEE (PC) MEMBER

- Fourth International Conference on Computational Intelligence in Communications, and Business Analytics (CICBA T21),
- 2020 IOTWR-2020 (IETE Zonal Seminar/International Conference/Student Convention on IOT in present WirelessRevolution) Salt lake, Kolkata, India.
- First International Conference on Bioinformatics & Biosciences (ICBB 2014), Pune, India
 Third International Conference on Software Engineering and Applications (SEAS 2014), Dubai, UAE
 First International Conference on Data Mining and Database (DMDB-2014), Pune, India
 Sixth International Conference on Web services & Semantic Technology (WeST 2014), Chennai, India
 Fifth International Conference on Internet Engineering & Web services (InWeS 2014), Delhi, India
 The Sixth International Conference on Wireless, Mobile Network & Applications, Chennai, India
 Third International Conference on Signal, Image Processing and Pattern Recognition, Delhi, India
 The 7th International Conference on Network Security & Applications (CNSA-2014), Zurich, Switzerland
 First International Conference on Signal Processing (CSIP-2014), Dubai, UAE
 Third International workshop on Embedded Systems and Applications (EMSA-2014), Chennai, India
 Second International Conference on Signal Image Processing and Multimedia, Zurich, Switzerland

Second International Conference on Instrumentation and Control Systems (CICS-2014)" Dubai, UAE Related conferences of AIRCC worldwide

The 4th International Conference on Computer Science and Information Technology, Sydney, Australia.

2013 Second International Conference of Data Mining & Knowledge Management, Dubai, UAE.

APPOINTED AS A REVIEWER

- 1. Neural Networks, Elsevier, ISSN: 0893-6080
- 2. Multimedia Tools and Applications, Springer, Print ISSN 1380-7501
- 3. Neural Processing Letters, Springer, Print ISSN 1370-4621
- 4. International Journal Microsystem Technologies, Springer, Print ISSN 0946-7076
- 5. Transactions of the Indian National Academy of Engineering, Springer, Print ISSN 2662-5415
- **6.** International Journal of Networks Security (IJNS), ISSN 1816-353X (Print)
- 7. International Journal on AdHoc Networking Systems, ISSN 2249 -2682 (Print)
- 8. Second International Conference of Data Mining & Knowledge Management, 2-3/11/2013, Dubai, UAE.
- 9. International Journal of Computer Networks & Communications. ISSN 0975-2293 (Print)
- 10. International Journal on AdHoc Networking Systems (IJANS), ISSN 2249 2682 (Print)
- 11. The Science and Information Organization" (SAI), New York- 11432, USA
- **12.** International Journal of Electrical and Computer Engineering (IJECE), Institute of Advanced Engineering and Science, ISSN 2088-8708, e-ISSN 2722-2578
- **13.** Bulletin of Electrical Engineering and Informatics (BEEI), Institute of Advanced Engineering and Science, ISSN: 2089-3191, e-ISSN: 2302-9285
- **14.** International Journal of Network Security (IJNS), ISSN 1816-353X (Print) ISSN 1816-3548 (Online)

ORGANISATION OF INTERNATIONAL CONFERENCES, INCLUDING MEMBERSHIP IN THE STEERING AND/OR PROGRAMME COMMITTEE

- 24.12.2022 Organizer at Department of Biotechnology (DBT) sponsored "One-Day Seminar on "From Computer Scientist to Software Engineer: How I Learned to Stop Worrying and Love Production Systems", Ramakrishna Mission Vidyamandira, Belur Math, WB, India.
- 12.12.2022 Organizer at Department of Biotechnology (DBT) sponsored "One-Day Seminar on Applications of Computer Sciences to Address Biological Problems", Ramakrishna Mission Vidyamandira, Belur Math, WB, India.
- Organizer at Department of Biotechnology (DBT) sponsored "One-Day Seminar on Cyber Security and it's Research Challenges in Healthcare", Ramakrishna Mission Vidyamandira, Belur Math, WB, India.
- Organizer at Department of Biotechnology (DBT) sponsored "One-Day Workshop on Artificial Intelligence in Healthcare", Ramakrishna Mission Vidyamandira, Belur Math, WB, India.
- Organizer at Department of Biotechnology (DBT) sponsored "One-Day Faculty Development Program on Machine Learning and Deep Learning in Biology", Ramakrishna Mission Vidyamandira, Belur Math, WB, India.
- 12.03.2022 Organizer at Department of Biotechnology (DBT) sponsored "Industry Orientation Interactive Talk", Ramakrishna Mission Vidyamandira, Belur Math, WB, India.
- 12.03.2022 Organizer at Department of Biotechnology (DBT) sponsored "One-Day Faculty Development Program on Data Analytics for Health and Wellness Organizer", Ramakrishna Mission Vidyamandira, Belur Math, WB, India.
- 07.12.2021 Organizer at "One-Day Seminar on Cyber Security", Ramakrishna Mission Vidyamandira, Belur Math, WB, India.
- Office Of
- Organizer at "One-Day Workshop on Introduction to Docker", Ramakrishna Mission Vidyamandira, Belur Math, WB, India.
- 27.01.2021 Organizer at "One-Day Workshop on IoT and It's Application", Ramakrishna Mission Vidyamandira, Belur Math, WB, India.
- 28.01.2021 Organizer at "One-Day Workshop on Practical Demonstration of IoT", Ramakrishna Mission Vidyamandira, Belur Math, WB, India.
- 01.08.2020 Organizer at "One-Day Workshop on SAP overview and Applications", Ramakrishna Mission Vidyamandira, Belur Math, WB, India.

- 18.02.2020 Organizer at Department of Biotechnology (DBT) sponsored "One-Day Workshop on Information Processing in the Paradigm of Computational Biology", Ramakrishna Mission Vidyamandira, Belur Math, WB, India.
- 19.02.2020 Organizer at Department of Biotechnology (DBT) sponsored "One-Day Hands-on Workshop on Information Processing in Computational Biology (IPCB-2020)", Ramakrishna Mission Vidyamandira, Belur Math, WB, India.
- 29.07.2019 Organizer at "One-Day Workshop on Counting Low Frequency Items in A Datastream", Ramakrishna Mission Vidyamandira, Belur Math, WB, India.
- 13.11.2019 Organizer at "One-Day Workshop on Scale to Next Significant Platform of Technology", Ramakrishna Mission Vidyamandira, Belur Math, WB, India.
- Office Of
- 18.01.2019 Organizer at "One Day Conference on Advancement in Computation, Communication and Electronics Paradigm (Accep-2019)", Ramakrishna Mission Vidyamandira, Belur Math, WB, India.
- 28.03.2018 Organizer at "Two-Day Workshop on Emerging Trends in Image Processing, Computer Vision
- 29.03.2018 and Pattern Recognition (IPCVPR-2018), Technical Sponsorship with Computer Society of India (CSI), Kolkata Chapter, Region-Ii", Ramakrishna Mission Vidyamandira, Belur Math, WB, India.
- 07.03.2017 Organizer at "One-Day workshop on Introduction to Bitcoin and Blockchain", Ramakrishna Mission Vidyamandira, Belur Math, WB, India.
- Organizer at Spoken Tutorial, IIT Bombay, funded by National Mission on Education through ICT, MHRD, Govt. of India, held at M.U.C. Women's College, WB, India
- 2017 Life Member, Computer Society of India (http://csi-india.org) [Membership No.: 01510463]
- Member of "The Science and Information Organization" (SAI), Hillside Avenue, New York-11432, USA
- Member, International Association of Engineers (IAENG) (http://www.iaeng.org) [Membership No.: 181408]
- 2016 Member, Board of Studies, Ramakrishna Mission Vidyamandira, Belur Math.
- Registered as Faculty Co-ordinator at Spoken Tutorial Project, IIT Bombay during session 2015 to 2017, representing M.U.C. Women's College, Burdwan.
- Acted as member of Information and Communication Technologies Committee of M.U.C. Women's College, Burdwan for the academic session 2015-16 and 2016-17.
- 2015-till date Acted as member of Cultural, Sports, Journal Committee of Ramakrishna Mission Vidyamandira, Belur Math forSession 2016-2017, 2017-18 and 2018-19.

ORIENTATION PROGRAMME ATTEND

17.01.2020-06.02.2022 117th Orientation programme at UGC Human Resource Development Centre, The University of Burdwan and obtained grade **A+**.

REFRESHERS COURSE / SUMMER SCHOOL ATTEND

17.08.2020-30.08.2020
Online Refreshers course on 59th Online Refresher Course: Computer Science & ICT at UGC Human Resource Development Centre, Sardar Patel University Mota Bazar, Opp. SICART, Vallabh Vidyanagar-388 120, Gujarat and obtained grade A. Summer School on Changing Role of Use of ICT in Higher Education at UGC Human Resource Development Centre, The University of Burdwan and obtained grade A+.

SHORT TERM COURSE ATTEND

15.11.2019-21.11.2019 Short Term course on Use of Open-source Software and Online Support System in Higher education & Research at UGC Human Resource Development Centre, The University of Burdwan.

FACULTY DEVELOPMENT PROGRAMME (FDP) ATTEND

17.06.2013-28.06.2013 AICTE Sponsored Two Week Faculty Development Programme (FDP) on Soft Computing Approach in Cryptography held on 17-28 June, 2013, Department of Information Technology, Kalyani Government Engineering College, Kalyani, Nadia-741235, West Bengal, India.

WORKSHOP ATTEND

- 1. Intellectual Property Rights Awareness Programme (NIPAM) held on 20th January, 2022, organized by Office of the Controller General of Patents Design & Trademarks, Department of promotion Industry and Internal Trade, Ministry of Commerce and Industry, Govt. of India in association with IQAC, Ramakrishna Mission Vidyamandira, Belur Math, Howrah-711202, West Bengal, India.
- 2. Industry Led Talks on Natural Language Processing held on 6th December, 2021, organized by joint collaboration with TCS, Department of Computer Science and Electronics of Ramakrishna Mission Vidyamandira, and Department of Computer Science of Ramakrishna Mission Vivekananda Educational and Research Institute.
- **3.** Industry Led Talks on Cloud Security held on 7th December, 2021, organized by joint collaboration with TCS, Department of Computer Science and Electronics of Ramakrishna Mission Vidyamandira, and Department of Computer Science of Ramakrishna Mission Vivekananda Educational and Research Institute.
- **4.** Online Workshop on Career Advancement Scheme (CAS), IQAC, Gokhale Memorial Girls' College, held on 28 June 2021 from 5 pm to 7 pm.
- **5.** One-day Hands on Workshop on Information Processing in Computational Biology (IPCB-2020) held on 19th February, 2020, organized by Department of Computer Science and Electronics, Ramakrishna Mission Vidyamandira, Belur Math, Howrah-711202, West Bengal, India.
- **6.** One-day Seminar on Information processing in the paradigm of Computational Biology held on 18th February, 2020, organized by Department of Computer Science and Electronics, Ramakrishna Mission Vidyamandira, Belur Math, Howrah-711202, West Bengal, India.
- 7. Two Day Workshop on "Emerging Trends in Image Processing, Computer Vision & Pattern Recognition" (IPCVPR-2018) held on 28-29th March, 2018, technically sponsored by Computer Society of India(CSI) Kolkata Chapter, Region II", organized by Department of Computer Science and Electronics, Ramakrishna Mission Vidyamandira, Belur Math, Howrah-711202, West Bengal, India.
- **8.** Special lecture on "Biomedical Images" by Prof. Jens Rittscher, Oxford University and Prof. Uma Pada Pal, ISI, Kolkata, at Department of Computer Science on 01.02.2018.
- **9.** One day workshop on "ICT based E-Secured Application Software", held on 21st April, 2017, organized by the Department of Computer Science, M.U.C. Women's College, Burdwan.
- **10.**RUSA-Funded one-day Platinum Jubilee Commemorative Seminar on "RFID and Library Services: Use & Concern", organized by the Central Library, Ramakrishna Mission Vidyamandira, Belur Math on March 22, 2017.
- **11.**National-Level Faculty Development Programme on "LaTeX & Python", jointly organized by Department of Computer Science, M.U.C. Women's College and Spoken Tutorial, I.I.T. Bombay at M.U.C. Women's College on 3rd Feb.2017.
- **12.**Two Days Workshop on Computational Methodologies and Applications (CMA-2013), Sponsored by West Bengal State Council of Higher Education. Held at Department of Computer Science & Engineering, University of Kalyani, West Bengal, April 22-23, 2013.
- 13. One Day Workshop no Computational Methodologies and Applications (CMA-2014), Sponsored by DST PURSE Scheme at University of Kalyani, Technically sponsored by IEEE CIS Kolkata Chapter. Held at Department of computer science & Engineering, University of Kalyani, West Bengal, March 21, 2014.
- **14.**One day Workshop on "HTML 5", organized by the Department of Computer Science, M.U.C Women's College in collaboration with N.I.I.T., Burdwan on 29.12.2016.
- **15.**One day Workshop on "Interview, CV Writing & Career Promotion Skills", jointly organized by the Department of Computer Science and Nutrition, M.U.C Women's College on 22.06.2018.

TUTORIAL ATTEND

- 21.12.2011-23.12.2011 International Conference on Recent Trends in Information System (RETIS 2011) BY IEEE, Jadavpur University, Kolkata, West Bengal, India.
- 14.12.2011-16.12.2011 International Conference on Computer Information Systems Analysis and Technologies (CISIM 2011), BY SPRINGER held on December 14-16, 2011, Department of Computer Science & Engineering, University of Calcutta, West Bengal, India.
- 03.06.2011-05.06.2011 International Conference on Recent Trends in Information Technology (ICRTIT 2011) by IEEE held on 3-5 June 2011, Madras Institute of Technology, Anna University, Chennai, Tamil Nadu, India.

INTERNATIONAL CONFERENCE ATTEND WITHOUT PAPER

- 14.12.2011-16.12.2011 International Conference on Computer Information Systems Analysis and Technologies (CISIM 2011), by SPRINGER, Department of Computer Science & Engineering, University of Calcutta, West Bengal, India.
- 01.12.2012-02.12.2012 47th Annual National Convention of Computer Society of India & the First International Conference on Intelligence Infrastructure organized by Computer Society of India, Kolkata chapter at Science City, Kolkata, India.

NATIONAL CONFERENCE ATTEND WITHOUT PAPER

18.01.2019 One-day Conference on Advancement in Computation, Communication, and Electronics Paradigm

(ACCEP-2019), organized by Department of Computer Science and Electronics, Ramakrishna

Mission Vidyamandira, Belur Math, Howrah-711202, West Bengal, India.

29.01.2010 National Conference on Computing and Systems (NaCCS 2010), Department of Computer

Science, The University of Burdwan, Golaphag North, Burdwan –713104, West Bengal, India.

THESIS AND PROJECT TITLE

Ph.D Thesis: Towards Design and Implementation of Soft Computing based Cryptographic Techniques

for Wireless Communication.

M.Tech (CSE) Thesis: Towards Design and Implementation of Neural Network Guided Secured Communication

techniques.

M.C.A Project: Computerization of Material Management System for "INDIAN RAILWAYS" and

building a Web Site of Material Management System for Updating and watching the status

through web.

SUBJECT KNOWLEDGE

Cryptography, Cybersecurity, AI and Soft Computing, Machine Learning, Deep Learning, Computer Vision, Data Mining, Computer Fundamentals, Programming Language C, Algorithms and Data Structures, Operating System, Digital Logic, Computer Architecture and Organization, Object Oriented Programming (OOP), Computer Network, Data Communication, and Internet Technology, Software Engineering, Data Base Management Systems (DBMS), Microprocessor, Neural Network, Networking, Formal Language and Language Translation, etc.

CO-CURRICULAR ACTIVITIES

- 1. Acted as an anchor of Foundation Day Oration "Swami Vimuktananda Memorial Lecture" at Ramakrishna Mission Vidyamandira Belur Math, Howrah, West Bengal, PIN: 711202 A Residential Autonomous College affiliated to Calcutta University DST-FIST awarded college; DBT Star College, 19th August 2022.
- **2.** Acted as an anchor of Special Seminar" Power of Focus" at Ramakrishna Mission Vidyamandira Belur Math, Howrah, West Bengal, PIN: 711202 A Residential Autonomous College affiliated to Calcutta University DST-FIST awarded college; DBT Star College, 07th April 2022.
- **3.** Acted as an anchor of Ninth Convocation of Ramakrishna Mission Vidyamandira Belur Math, Howrah, West Bengal, PIN: 711202 A Residential Autonomous College affiliated to Calcutta University DST-FIST awarded college; DBT Star College, 11th December 2021.
- **4.** Acted as an anchor of "Pre & Post-Independence Scientific Development in India in Different Areas", Internal Quality Assurance Cell, Ramakrishna Mission Vidyamandira Belur Math, Howrah, West Bengal, PIN: 711202 A Residential Autonomous College affiliated to Calcutta University DST-FIST awarded college; DBT Star College, 2nd and 3rd October 2021.
- **5.** Acted as an anchor of Cultural Program of 3rd Cycle of NAAC visit at Ramakrishna Mission Vidyamandira Belur Math, Howrah, West Bengal, PIN: 711202 A Residential Autonomous College affiliated to Calcutta University DST-FIST awarded college; DBT Star College, 22nd September 2021.
- **6.** Acted as an anchor of Seventh Convocation of Ramakrishna Mission Vidyamandira Belur Math, Howrah, West Bengal, PIN: 711202 A Residential Autonomous College affiliated to Calcutta University DST-FIST awarded college; DBT Star College, 7 December 2019.
- 7. Acted as an anchor of "ফিরে দেখা: ফিন পফিকৃৎ ফিজ্ঞানী "In commemoration of 125th birth anniversary of Shantiswarup Bhatnagar and S. N. Bose and 100th birth anniversary of Bikram Sarabhai, Organized by Swami Vivekananda Research Centre, Vidyamandira In collaboration with Bally Utsav Samity on 6 September 2019.
- **8.** Acted as an anchor of CSI: Annual Convention of the Computer Society of India, Social Transformation Digital Way, 52nd Annual Convention of the Computer Society of India, CSI 2017, Kolkata, India, January 19-21, 2018.
- 9. Participated as a singer in cultural program of First International Conference on Computational Intelligence: Modeling, Techniques and Applications (CIMTA- 2013), Procedia Technology, Elsevier, September 27-28, 2013, Department of Computer Science & Engineering, University of Kalyani, Kalyani, Nadia-741235, West Bengal, India.
- **10.** As a Scout of "The Bharat Scouts & Guides", I have prepared myself for service to god, country and my fellow being. I have been awarded RAJYA PURASKAR.
- 11. Attended "3rd Saarc / 13th National Jamboree" held At Khurda, Orissa, India.
- 12. Attended "Silver Jubliee District Rally "of Eastern Railway, Howrah District.

VOLUNTEER CERTIFICATE

- 1. First International Conference on Computational Intelligence: Modeling, Techniques and Applications (CIMTA- 2013), Procedia Technology, Elsevier, September 27-28, 2013, Department of Computer Science & Engineering, University of Kalyani, Kalyani, Nadia-741235, West Bengal, India.
- **2.** 47th Annual National Convention Of Computer Society Of India Organized By: CSI Kolkata Chapter Theme: Intelligent Infrastructure Convention Event: International Conference on Intelligent Infrastructure Date: December 1-2,2012, Science City, Kolkata.
- **3.** Successfully trained students registered under Spoken Tutorial, I.I.T. Bombay for paper Advanced C Programming, Java Programming, Python, etc at M.U.C. Women's College during the academic session 2015-16 and 2016-17.
- **4.** Conducted Quiz Competition at M.U.C Women's College at College Fest during the academic session 2015-
- **5.** Attended Inter-College Quiz Competition at M.U.C Women's College on 15.08.2018.

SUMMARY

- ❖ Department of Science & Technology (DST), Govt. of INDIA Ex. INSPIRE Fellow (Senior Research Fellow-Professional) in Computer Science & Engineering.
- ❖ University First Class First Rank Holder in M.Tech (Computer Science & Engineering).
- University First Class First Rank Holder with Distinction in M.C.A (Master of Computer Application).
- University First Class Tenth Rank Holder in B.C.A (Bachelore of Computer Application).
- ❖ Total number of publications is 132.

DECLARATION

I hereby declare that the above written particulars are true to the best of my knowledge and belief.

(DR. ARINDAM SARKAR)