SARBAJIT MANNA

M.E. (Computer Science & Engineering), B. Tech. (Computer Science & Engineering)
Assistant Professor, Department of Computer Science & Electronics, Ramakrishna Mission Vidyamandira
Belur Math, Howrah-711202, West Bengal, INDIA

HONORARY ASSOCIATION WITH LEARNED BODIES

- Life Member, Computer Society of India (http://csi-india.org) [Membership No.: I1510491]

- Life Member, Cryptology Research Society of India (http://crsind.com)
  [Membership No.: L/0764]

- Global Member, Internet Society (ISOC), India, Kolkata Chapter (http://www.isoc.org/)
  [Registration No.: 455825]

- Member, International Association of Engineers (IAENG) (http://www.iaeng.org)
  [Membership No.: 149026]

- Member, The Computer Science Teachers Association (CSTA) (http://www.csta.acm.org)
  [Membership No.: 3060379]

- Member, Board of Studies, Ramakrishna Mission Vidyamandira, Belur Math

ASSOCIATION AS REVIEWER

- Member of Reviewer Team, International Journal of Electrical and Computer Engineering (IJECE)
  (http://iaescore.com/journals/index.php/IJECE)
  (Number of Papers reviewed for IJECE till date: 1)

- Member of Reviewer Team, International Conference on Computational Science and Engineering
  (ICCSE2016) organized by Department of Electronics and Communication Engineering &
  Department of Computer Application, RCCIIT, Kolkata
  (Number of Papers reviewed for ICCSE2016 till date: 4)

ASSOCIATION WITH TECHNICAL EVENTS

- Convener of conference on Advancement in Computation, Communication and Electronics
  Paradigm (ACCEP-2019) held on 18th January, 2019 at Ramakrishna Mission Vidyamandira, Belur
  Math

- Coordinator of Two-Day Workshop on Emerging Trends in Image Processing, Computer Vision
  and Pattern Recognition (IPCVPR-2018) technical sponsorship with Computer Society of India
  (CSI), Kolkata Chapter, Region II, held on 28th and 29th March, 2018 at Ramakrishna Mission
  Vidyamandira, Belur Math

- Convener of Platinum Jubilee Commemorative National Seminar on Recent Trends in Verification : Technology and Challenges held on 22nd September, 2016 at Ramakrishna Mission Vidyamandira, Belur Math

LIST OF PUBLICATIONS

INTERNATIONAL JOURNAL PUBLICATION

- **Sarbajit Manna**, Saurabh Dutta, "A Stream Cipher based Bit-Level Symmetric Key Cryptographic Technique using Chen Prime Number", International Journal of Computer Applications (ISSN: 0975-8887) ,Vol. 107(12), pp.18-22, December 2014.

NATIONAL JOURNAL PUBLICATION

- **Sarbajit Manna**, Saurabh Dutta, "Proposing A Symmetric Key Bit-Level Block Cipher", The Bulletin of Engineering and Science (ISSN: 0974 7176) ,Vol. 6, No. 2, pp.37-41, 2015.

NATIONAL CONFERENCE PUBLICATION

- **Sarbajit Manna**, Saurabh Dutta, "Proposing Ciphering Protocol", In the proceedings of Role of Mathematics in Socio Economic Research (RMSER), pp. 16, organized by L'SER & ORSI, Kolkata Chapter in association with Department of Mathematics, Heritage Institute of Technology, Kolkata, March 28-29, 2015.

BOOK CHAPTER PUBLICATIONS

- Arpan Kumar, **Sarbajit Manna**, "Graphic User Interface Based Implementation of Longest Common Subsequence Problem in DNA Sequencing", In the proceedings of Second International Conference on Manufacturing, Material Science and Engineering (ICMMSE), 2020, DOI 10.1063/5.0057916, ISBN 978-0-7354-4114-9 [Online], pp. 1-9, organized by CMR Institute of Technology, Hyderabad, December 18-19, 2020.

- Ramkrishna Das, **Sarbajit Manna**, Saurabh Dutta, "Cumulative Image Encryption Approach based on user Defined Operation, Character Repositioning, Text Key and Image Key Encryption Technique and Secret Sharing Scheme", In the proceedings of International Conference on Power, Control, Signals and Instrumentation Engineering (ICPCSI), DOI 10.1109/ICPCSI.2017.8391813, ISBN 978-1-5386-0813-5 [Print] 978-1-5386-0814-2 [Online], pp. 748-753, organized by Department of Electrical and Electronics Engineering, Saveetha Engineering College, Chennai, September 21-22, 2017.

- Ramkrishna Das, **Sarbajit Manna**, Saurabh Dutta, "Secure User Authentication System using Image based OTP and Randomize Numeric OTP based on User's Unique Biometric Image and Digit Repositioning Scheme", In Communication, Devices and Computing, Lecture Notes in Electrical Engineering, Springer, Edited by Jaydeb Bhaumik, Indrajit Chakrabarti, Bishnu Prasad De, Banibrata Bag, Surajit Mukherjee, DOI 10.1007/978-981-10-8585-7, ISBN 978-981-10-8584-0 [Print] 978-981-10-8585-7 [Online], Proceedings of International Conference on Communication, Devices & Computing (ICCDC 2017), pp. 83-93, organized by Department of Electronics & Communication Engineering, Haldia Institute of Technology, Haldia, November 2-3, 2017.

- **Sarbajit Manna**, Soumya Banerjee, Prantik Panja, Saurabh Dutta, "Secure Symmetric Key Transmission of Messages using Random Shuffling of Spiral Matrix and Multiplicative Inverse (RSSMMI)", In Advanced Computational and Communication Paradigms, Advances in Intelligent Systems and Computing Series Vol. 706, Springer, Edited by Siddhartha Bhattacharyya, Nabendu Chaki, Debanjan Konar, Udit Kr. Chakraborty, Chingtham Tejbanta Singh, DOI 10.1007/978-981-10-8237-5, ISBN 978-981-10-8236-8 [Print] 978-981-10-8237-5 [Online], Proceedings of First International Conference on Advanced Computational and Communication Paradigms (ICACCP-2017), Vol. 2, pp. 135-144, organized by Department of Computer Science and Engineering, Sikkim Manipal Institute of Technology, Rangpo, East Sikkim, September 8-10, 2017.

- **Sarbajit Manna**, Mohit Prajapati, Ayan Sett, Kallol Banerjee, Saurabh Dutta, "Design and Implementation of A Two-Layered Hybrid Cryptosystem", In the proceedings of Third IEEE International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN 2017), DOI 10.1109/ICRCICN.2017.8234529, ISBN 978-1-5386-1931-5 [Online], pp. 327-331, organized by Department of Information Technology, RCC Institute of Information Technology, Kolkata, November 3-5, 2017.

- **Sarbajit Manna**, Saurabh Dutta, "A Stream Cipher Based Bit-Level Symmetric Key Technique Using ASCII Value of Number and Position of 0's and 1's", In Computational Science and Engineering, Taylor & Francis Group, Edited by Arpan Deyasi, Soumen Mukherjee, Pampa Debnath, Arup Kumar Bhattacharjee, ISBN 978-1-138-02983-5 [Print] 978-1-315-37502-1 [Online], Proceedings of the International Conference on Computational Science and Engineering (ICCSE 2016), pp 325-328, organized by Department of ECE and Computer Application, RCCIIT, Kolkata, October 4-6, 2016.

BOOK EDITED

- **Sarbajit Manna**, Avishek Barman, Dr. Ranjit Das, Dr. Atanu Mondal, Dr.Arindam Sarkar, "Advancement in Computation, Communication and Electronics Paradigm", Proceedings of conference on Advancement in Computation, Communication and Electronics Paradigm (ACCEP-2019), ISBN 978-81-940096-0-3 [Print], organized by Department of Computer Science and Electronics, Ramakrishna Mission Vidyamandira, Belur Math, Howrah, January 18, 2019.

SEMINAR/CONFERENCE/WORKSHOP/SHORT TERM COURSE ATTENDED

- AICTE Sponsored online STTP (Phase-2) on "Data Science and Machine Learning" organized by Department of CSE, Narula Institute of Technology, Kolkata from 07.06.2021 to 11.06.2021.

- Six days' National Webinar Series on "Transformational Technologies in Recent Days (TTRD-2021)" organized by Department of Information Technology, B. P. Poddar Institute of Management & Technology, Kolkata, from 17.05.2021 to 22.05.2021.

- Five days' online National Faculty Development Program (FDP) on "Advancement of Intelligent System and Computation" organized by Department of CSE, JIS College of Engineering, West Bengal in collaboration with Computer Society of India (CSI), from 20.04.2021 to 24.04.2021.

- Two days' National Webinar on "Fake News and Image Detection on Social Media" sponsored by DST-SERB, organized by Department of Computer Science, Vidyasagar University, Paschim Medinipur, on 15.03.2021 and 16.03.2021.

- National Webinar on "Machine Learning and its application (NWMLA-2020)" organized by Department of CSE, MCA & School of Applied Science & Humanities, Haldia Institute of Technology, from 18.11.2020 to 20.11.2020.

- AICTE Sponsored online STTP on "Big Data Analytics using Soft Computing Tools" organized by Department of IT, MCKV Institute of Engineering, Liluah, Howrah from 05.10.2020 to 10.10.2020.

- International Webinar on "Anonymity and Obfuscation" organized by Centre for Cryptography, Cybersecurity and Digital Forensics, LNMIIT, Jaipur on 22.09.2020.

- Seminar on Information Processing in the Paradigm of Computational Biology (IPCB-2020) under DBT Star College Scheme organized by Computer Science and Electronics Department, Ramakrishna Mission Vidyamandira, Belur Math on 18.02.2020.

- Hands-on Workshop on Information Processing in Computational Biology (IPCB-2020) under DBT Star College Scheme organized by Computer Science and Electronics Department, Ramakrishna Mission Vidyamandira, Belur Math on 19.02.2020.

- Swayam NPTEL SPOC Workshop(EZ) organised by IIT, Kharagpur on 01.02.2020.

- NPTEL SPOC Workshop(EZ) organised by IIT, Kharagpur on 27.07.2019.

- NPTEL SPOC Workshop(EZ) organised by IIT, Kharagpur on 02.02.2019.

- Workshop on "MOOCs, E-Content and Open Educational Resources" organized by UGC-HRDC, Burdwan University from 30.10.2018 to 05.11.2018.

- Workshop on "Student Guidance, Counselling & Career Planning" organized by UGC-HRDC, Burdwan University from 25.08.2018 to 31.08.2018.

- NPTEL SPOC Workshop(EZ) organised by IIT, Kharagpur on 03.08.2018.

- Second workshop on "Big Data Analytics: Theory & Practice" organized by Department of Computer Science, Ramakrishna Mission Vivekananda Educational and Research Institute (RKMVERI) in collaboration with Association for Computer Science & Discrete Mathematics on 02.06.2018.

- Workshop on "Revised Assessment and Accreditation Procedure of NAAC" organized by Internal Quality Assurance Cell, Ramakrishna Mission Vidyamandira, Belur Math on 04.05.2018.

- NPTEL SPOC Workshop(EZ) organised by IIT, Kharagpur on 06.01.2018.

- Platinum jubilee commemorative seminar on "RFID and Library Services: Use & Concern" organized by Central Library, Ramakrishna Mission Vidyamandira, Belur Math on 22.03.2017.

- Seven days' short term course on "Computer and Digital Education" organized by UGC-HRDC, University of Calcutta from 23.02.2017 to 01.03.2017.

- Two days' workshop on "A Flavour of Android" organized by MCA department in collaboration with Information Technology department, MCKV Institute of Engineering, Liluah on 17.02.2017 and 18.02.2017.

- TEQIP-II sponsored two days national workshop on "Medical Systems and Imaging" organized by MCKV Institute of Engineering, Liluah on 01.10.2016 and 02.10.2016.

- National seminar on "Patent Awareness" organized by IQAC and SVRC, Ramakrishna Mission Vidyamandira, Belur Math on 29.09.2016.

- TEQIP-II sponsored two days' workshop on "Waging War against Cyber Crime" organized by A.K. Choudhury School of Information Technology, University of Calcutta, IIIM Kolkata and West Bengal National University of Juridical Sciences(WBNUJS) on 27.09.2016 and 28.09.2016 at NUJS Auditorium, WBNUJS.

- Self-sponsored short term course on "Open Source Software for Scientists and Engineers (OSSSE2015)" organized by National Institute of Technology, Durgapur from 07.12.2015 to 11.12.2015.

- UGC sponsored national seminar on "Application of Cryptography in Modern Computing" organized by Computer Science department, Ramakrishna Mission Vidyamandira, Belur Math on 07.08.2014.

REFRESHER COURSE ATTENDED

- Interdisciplinary UGC Sponsored Refresher Course on Advances in Instrumentation and Automation : Role of ICT organized by Department of Instrumentation & Electronics Engineering, Jadavpur University from 03.12.2018 to 22.12.2018.

ORIENTATION PROGRAMME ATTENDED

- 66th Orientation Programme organized by UGC-HRDC, Jadavpur University from 21.08.2017 to 18.09.2017.

PROJECTS GUIDED (B.Sc. LEVEL)

- "Ramakrishna Mission Vidyamandira E-Learning Portal" - using HTML-5, CSS-2.1, Javascript-ES7, Django-3.1, MySQL-8.0, Django-3.1 built-in server.

- "Online Departmental Library Management System" – using HTML-5, CSS-2.1, Javascript-ES7, PHP-7.3, Bootstrap-4, MySQL-8.0, XAMPP-7.3 server.

- "Randomized Symmetric Session Key Based Secure Transmission of Message" – using C as Programming Language

- "Randomized LSB Steganography Based Image Encryption with Visual Secret Sharing"- using Java and Matlab(2016a) as Programming Language

- "Design and Implementation of a Two-Layered Hybrid Cryptosystem" – using C as Programming Language

- "Design of A Two-Stage Symmetric Key Cryptographic Technique" – using Java as Programming Language

- "An Approach to Design a Stream Cipher Based Variable Length Symmetric Key Cryptographic Technique" – using C as Programming Language

FIELD OF SPECIALIZATION

- Cryptography

- Steganography

COURSES TAUGHT

- Programming Language C, Python, Object Oriented Programming Using Java, Computer Fundamentals, Computer Architecture and Organization, Digital Logic, Data Communication and Computer Networks, Operating System, Cryptography, Data Structures and Algorithms, Software Engineering, Web Programming, Network Programming.

PROFESSIONAL INVOLVEMENTS

- Ramakrishna Mission Vidyamandira, Belur Math, Howrah-711202, West Bengal, INDIA
(Assistant Professor, Experience: 7 years (Approx.))

- Ghoshpur High School, Haur-721131, Purba Medinipur, West Bengal, INDIA
(Assistant Teacher, Experience: 5.5 years (Approx.))

PROJECT

- M.E (CSE) : Structural and Texture Based Face Recognition Approaches

- B.Tech. : 8051 Microcontroller Simulator using Visual Basic 6.0

EDUCATION

- Qualified NET (National Eligibility Test) in Computer Science and Applications in July, 2012 (Both in Lectureship and JRF category) conducted by UGC

- M.E. (Computer Science & Engineering)
  [From West Bengal University of Technology, completed in 2009 with First Class]

- Qualified GATE (Graduate Aptitude Test in Engineering) in Computer Science and Engineering in 2007

- B. Tech. (Computer Science & Engineering)
  [From West Bengal University of Technology, completed in 2006 with First Class]

- HIGHER SECONDARY (Science)
  [From West Bengal Council of Higher Secondary Education in 2002 with First Division (Star)]

- SECONDARY
  [From West Bengal Board of Secondary Education in 2000 with First Division (Star)]

RELEVANT PERSONAL DATA

Age as on Date:	36 years (Approx.)
Nationality:	Indian
Religion:	Hindu
Permanent Residence:	Kakdihi, Mecheda, Purba Medinipur- 721137, West Bengal, INDIA
Mail ID:	sarbajit.cs@vidyamandira.ac.in, sarbajitonline@gmail.com
Contact Number:	+91-9474339952

I hereby declare that statements made in this entire document are true and complete to the best of my knowledge and belief.

Sarbajit Manna

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