

## Dr. Mrinal Kanti Sarkar

((PhD-CSE(JNUJ), M.Tech-CSE(IITKGP), B.Tech-CSE(WBUT))

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## Present address:

SRSVM, The University of Burdawan,

Dept. of CS, Kamarpukur, Hooghly,

West Bengal, India-712612.

Permanent Address: Vill-Kamalapur,

P.O-Purba Nehalpur, West Bengal-743437.

### CARRIER OBJECTIVE

My professional objective is to create and work in an environment which encourages mutual sharing of ideas and information to implement plans in the best interest of the organization. As well as, I want to fully utilize my knowledge to teach the students and want to grip new knowledge every day.

### TECHNICAL SKILL

- Languages Proficiency : C, Java.
- Subjects of Interest : OS, DS, AI, SE, PDS, DBMS, CN.
- Platforms : WINDOWS 98/XP/VISTA/2007, LINUX.

### TEACHING EXPERIENCE

- **Assistant Professor, HoD**, Dept. of CS, SRSVM, The University of Burdawan, June-2024 to till now
- **Professor, HoD**, Dept. of CSE, University of Engineering & Management Jaipur, Dec' 2018-May' 2024.
- **Assistant Professor, HoD**, Dept. of CSE, University of Engg. & Management Jaipur, Aug'2012-Nov'2018.
- **Senior Lecturer**, Dept. of CSE, The ICFAI University Tripura, July' 2010-July' 2012.
- Teaching Assistant, Dept. of CSE, IIT Kharagpur, July' 2008-June' 2010.

### EDUCATIONAL QUALIFICATION

- **Ph.D.**, in Computer Science and Engineering, Jaipur National University, Jaipur.
- **M.Tech**, in Computer Science and Engineering, IIT Kharagpur.
- **B.Tech**, in Computer Science and Engineering, Govt. College of Engineering and Ceramic Technology Kolkata.

### PH.D GUIDANCE (COMPLETED-2, ONGOING-2)

- Mr. Pramod Singh Rathore (12020008001008) **(Completed)**  
Title: Secure and Energy aware Multi-hop Routing using Enhanced Cat Salp Swarm Optimization Algorithm (ECSS) in clustering based Wireless Sensor Network.
- Mr. Shobhit Srivastava (12020008001011) **(Completed)**  
Title: Pre and Post COVID-19 Sentiment Analysis using Advanced Learning Analytics.
- Mrs. Rittwika Singh (12020008001003) **(Ongoing)**  
Title: An IOT Based Intelligent Framework for Smart Agriculture System.
- Mr. Manish Mathur (12023008001003) **(Ongoing)**  
Title: Advancing Urban Transportation Management: A computer Vision Based Vehicle Detection and Counting System.

### PATENT FILED

- A Framework for Ensuring Data Storage Security in Cloud Computing. **(File No.: 201911010621**, Dr. Mrinal Kanti Sarkar, Dr. Sanjay Kumar, Mr. Rupayan Das)
- Three-Dimensional (3D) USB Mouse and Android Based 3D Air Mouse System. **(File No.: 201931006951**, Shopan Dey, Mrinal Kanti Sarkar, Dr. Pradeep Kumar Sharma, Gunjan Paul, Ashis Kumar Singh)
- A Ethereum Wallet Blockchain. **(File No.: 202311058917**, Mr. Subrat Goutam, Dr. Mrinal Kanti Sarkar)
- Method For Classification of Eye Disease, **(File No.: 202311019077**, Dr. Mrinal Kanti Sarkar, Rishabh Khandelwal, Deepak Joashi)
- An Iot Based Smart Home Smoke Detection System, **(File No.: 202311061119**, Debajyoti Chatterjee, Dr. Mrinal Kanti Sarkar, Hriday Banerjee)
- A Parkinson's Disease Prediction System Using Machine Learning, **(File No.:202311058925**, Ayush Pallab Gupta, Dr. Mrinal Kanti Sarkar)
- Air Purifier Using Hepa Filter, **(File No.: 202311019680**, Debajyoti Chatterjee, Surajit Sur, Dr. Mrinal Kanti Sarkar, Hriday Banerjee, Suchanda Das, Dr. Pradeep Kumar Sharma)

### IMPORTANT ROLES

- **HoD**: Dept. of CS, SRSVM, The Burdawan University, From 22.05.2044 to till now.
- **HoD**: Dept. of CSE, UEM Jaipur, From 2013 to 20.05.2024.
- **Assistant Controller of Examination**: UEM Jaipur, from 2014 to 20.05.2024.
- **Placement Coordinator**: From 2014 to 2017.
- **Founding Member**: UEM Jaipur ACM Students Chapter (<http://acm-uemj.com>).
- **Advisory Committee**: UEM Jaipur ACM Students Chapter.
- Coordinated **AICTE, UGC, NAAC** visit.
- **Guest Reviewer**: Multimedia System (Springer)
- **Organizing Committee Member**:
  - Convenor, International Conference on Cognitive & Cloud Computing (IC3Com-2024), **Springer CCIS Series**, on 1st Aug-2nd Aug'2024, University of Engineering & Management Jaipur.



- IEEE 14 Annual Computing and Communication Workshop and Conference (CCWC-2024) on 8-10<sup>th</sup> January, 2024, **Columbia University, Las Vegas, USA. (Organized)**
- The 10th Annual Information Technology, Electromechanical and Microelectronic Conference (UEMCON-2019) on 1-2 Dec' 2021, University of Engineering & Management Jaipur, India.
- Global Conference on Artificial Intelligence & Application (GCAIA), on 8-10th Sept' 2021, University of Engineering & Management Jaipur, India,
- Global Conference on Artificial Intelligence & Application (GCAIA), on 8-10th Sept' 2020. University of Engineering & Management Jaipur, India.
- The 9th Annual Information Technology, Electromechanical and Microelectronic Conference (UEMCON-2019) on 13-15 March' 2019, B.M Birla Auditorium, Jaipur India.
- To Celebrate National Science Day, Conducted Inter School and Inter-College Technical Bonanza on 27th-28th Feb' 2019 at Science Park, Jaipur in collaboration with Dept. Of Science & Technology (DST), Govt. of Rajasthan.
- The 9th Annual Information Technology, Electromechanical and Microelectronic Conference (UEMCON-2019) on 13-15 March' 2019, B.M Birla Auditorium, Jaipur India.
- IEEE 9th Annual Ubiquitous Computing, Electronics & Mobile Communication Conference on 8-10th Nov, 2018, **Columbia University, New York, USA. (Organized)**
- International Conference on "Disruptive Technology & Disruptive Innovation- A Renaissance in this Century" (UEM CONGRESS-2017) on 16-18 Oct, 2017, Bangkok, Thailand. (Organized)
- IEEE 8th Annual Industrial Automation and Electromechanical Engineering Conference (IEMECON-2017) on 16-18 Oct, 2017, **Bangkok, Thailand. (Organized)**
- "CODEMANGAL" An International online Coding Competition in collaboration with UEM Jaipur ACM Students Chapter and CODE Chef on 24<sup>th</sup> March-2017.
- "CODMANIA" An International online Coding Competition in collaboration with UEM Jaipur ACM Students Chapter and CODE Chef on 23<sup>rd</sup> Aug-2016.
- Oracle Workforce Development Program in collaboration with Oracle University at UEM Jaipur-2015.
- Central Routine, UEM Jaipur and ICFAI Tripura.

#### ➤ **Co-ordinator:**

- ACM Distinguished Speaker Program on Cyber Security and Privacy for Smart Cities by Dr. Biplab Sikdar, Associate Professor, National University of Singapore on 2nd Sept' 2022.
- Edu Hub\_Tech Conference in association with Geeks for geeks, GitHub Campus Expert, Data protocol and University of engineering and Management Jaipur and community partner UEM Jaipur ACM Student chapter on 22nd Aug'2022
- 3-days hands-on workshop on Flutter Development conducted by Mr. Tamoy Karmokar in association with UEMJ ACM Students Chapter and GYTWorkz Technologies Pvt Ltd on 1st August, 2022- 4th August, 2022.
- Azure Dev Day Jaipur, a re-skills initiative collaboration with Azure Developer Community supported by Microsoft Azure and UEM Jaipur ACM chapter on 30th July'2022.
- **AICTE SPONSORED** Scheme for Promoting Interest Creativity and Ethics among Students (SPICES) under UEM Jaipur ACM students Chapter.
- **AICTE-ISTE SPONSORED** ONLINE INDUCTION/REFRESHER PROGRAMME ON "Emerging Trends, Issues and Challenges in Machine Learning and Big Data" 5th - 11th January 2022.
- ACM Distinguished Speaker Program on "Block chain and its application" by Dr. Dr. HL Gururaj on 10th Dec' 2021 at UEM Jaipur.
- UEM Techutopia ACM Foreign Talk by Prof. Peter Robinson, University of Cambridge, on Oct 15, 2020 on the topic "Computation of emotions".
- ACM Distinguished Speaker Webinar by Prof. Peter Robinson, University of Cambridge, on July 9, 2020 on the topic "Of machines and men".
- ACM Eminent Speaker Webinar by Mr. Kaarthik Sivakumar, Principal Engineer, Cisco Systems on 22nd June, 2020 on the topic "Security and Trust".
- Eminent Speaker Webinar by Prof. Dr. R. Ramanujam, Institute of Mathematical Sciences, Chennai on 17th June, 2020 on the topic " Why should we learn algorithms, and why should we learn algorithms?"
- ACM Distinguished Speaker Program by Dr. Brian A. Barsky, Professor, University of California at Berkeley, USA, at the UEM Jaipur premises on 19th Feb, 2020 on the topic "Boeing 737 MAX: Money, Machines, And Morals in Conflict
- ACM Distinguished Speaker Program on "What AI Can (And Can't) Do" by Dr. Toby Walsh on 25th Jan' 2019 at UEM Jaipur.
- Seminar on "Cheating Husbands Puzzles" by Mr. Pritam Bhattacharya at UEM Jaipur 2nd Oct 2018.
- Distinguished Speaker Program on "Cogniculture: Collaborative Cognition in Social Machines" by Dr. Gyana R. Parija on 9th Sept. 2018 at UEM Jaipur.
- ACM Distinguished Speaker Program on the topic of "Machine Learning the Harness Track: Crowdsourcing and Varying Race History" by Dr. Robert P. Schumaker on 26<sup>th</sup> July. 2018 at UEM Jaipur.
- ACM Distinguished Speaker Program on "Smart-Grid: Where Embedded Computing, Communication and Power System Meet" by Dr. Sandeep K Shukla on 16<sup>th</sup> Feb. 2018 at UEM Jaipur.
- ACM Distinguished Speaker Program on "Service Science and Service Computing" by Prof. Dr. Shirsha Rao on 27<sup>th</sup> Oct. 2017 at UEM Jaipur.
- ACM Distinguished Speaker Program on "Social Network Analysis for telecom business intelligence (Snazzy)" by Dr. Amit A Nanavati on 13<sup>th</sup> April 2017 at UEM Jaipur.
- Entrepreneurship WEEK India 2017 at University of Engineering & Management Jaipur.

- Panel discussion on "Stop stalking and other crimes against women by introduction of restraining order clauses in IPC and CRPC" on 11 March, 2014 at International Centre, New Delhi.
- "National Network Security Championship" with workshop series jointly being organized by Association for Computing Machinery, IIT Delhi and Network Bulls, Gurgaon, at UEM Jaipur on 21<sup>st</sup> and 22<sup>nd</sup> March 2014.
- "An International Science Model Competition and Exhibition" organized by UEM Jaipur on 25<sup>th</sup> November, 2012 at UEM Jaipur.
- A two-day national seminar on "Emerging Trends in Science & Technology" organized by The ICAFI University, Tripura on 25<sup>th</sup> and 26<sup>th</sup> March 2011 at The ICAFI University, Tripura.

## MEMBERSHIP

- **ACM Professional Member:** 2410716
- **IEEE Professional Member:** 92650970
- **The Indian Society for Technical Education:** LM132086
- **Member of Computer Science Teachers Assoc.:** 56460109
- **Member of International Association of Engineers:** 226061
- **Life Member of International Society for Research and Development:**
- **Google Scholar:** <https://scholar.google.com/citations?user=jpNRMjsAAAAJ&hl=en>
- **ResearchGate:** <https://www.researchgate.net/profile/Mk-Sarkar-2>
- **ORCID ID:** <http://www.orcid.org/0000-0001-5246-1851>
- **Vidwan:** <https://vidwan.inflibnet.ac.in/profile/231524>
- **SCOPUS ID:** <https://www.scopus.com/authid/detail.uri?authorId=56937902800>

## SCHOLARSHIPS/ ACHIEVEMENTS

- Received Appreciation for MENTOR by NPTEL online Certificate Course on Cloud Computing.
- Awarded Best Debutant for Entrepreneurship Week India 2015 by National Entrepreneurship Network.
- Ministry of Human Resource Development (Govt. of India) scholarship during M.Tech.
- GATE: Qualified with 330 score, 2014 and 95.6 percentile with 736rank (All India), 2008.
- Qualified Tata Institute of Fundamental Research (TIFR) Graduate School Admissions.
- WBJEE: WBJEE Examination Qualified.
- OTHER: Awarded from All India Sc. Teachers Association for Sc. Aptitude & Talent Test.

## JOURNAL PUBLICATION

- S. Srivastava, C. Chakraborty, **M. K. Sarkar**, "N-LSTM: Deep Belief Network for Sentiment Analysis in COVID-19 Discourse with Brain-Computer Interfacing and Neuron-Electronics", *Neural Computing and Applications*, Springer Nature (SCIE), (Under Revision).
- P.S Rathore, **M.K Sarkar** "Enhanced Cat Salp Swarm Algorithm with DYDOG Mechanism to Overcome Wormhole Attack in Wireless Sensor Networks", *International Journal of Computer Network and Information Security*, (Scopus) (Under Revision).
- S. Srivastava, C. Chakraborty, **M. K. Sarkar**, "Leveraging Machine Learning and Dimensionality Reduction for Sports and Exercise Sentiment Analysis after COVID-19 Scenario", *Measurement: Sensors*, Elsevier, ScienceDirect (Scopus), DOI: 10.1016/j.measen.2024.101182
- S. Srivastava, **M.K Sarkar** and C. Chakraborty "Sentiment analysis of Twitter Data using Machine Learning: COVID-19 Perspective", *International Journal of Data Analysis Techniques and Strategies*, InderScience, **Scopus**, Volume 16, Issue-1, pp: 1-16 DOI:10.1504/IJDATS.2024.137479
- S. Srivastava, C. Chakraborty and **M.K Sarkar** "A graph neural network-based machine learning model for sentiment polarity and behavior identification of COVID patients", *International Journal of Data Science and Analytics*, Springer Nature, **ESCI, Scopus**, DOI: <https://doi.org/10.1007/s41060-023-00469-7>
- P.S Rathore, **M.K Sarkar** and Rupayan Das, "A Comprehensive Review on Secure and Energy aware Multi-hop Routing in Clustering based Wireless Sensor Network", *Telecommunications and Radio Engineering*, **ESCI**. Volume 80, Issue 5, ISSN: 0040-2508, DOI: 10.1615/TelecomRadEng. 2021041203, Dec' 2021
- R. Das, D. Dash and **M. K Sarkar**, "HTMS: Fuzzy based Hierarchical Trust Management Scheme in WSN", *Wireless Personal Communications, Springer Journals, SCI*, Volume 112, Issue-2 PP:1079-1112, ISSN: 0929-6112, DOI: 10.1007/s11277-020-07092, April 2020.
- **M.K Sarkar** and Sanjay Kumar, "Analysis of Data Storage Security issues in Cloud Computing using Hybrid Encryption Scheme" *International Journal of Advancement in Engineering, Management & Applied Science*, ISSN: 2349-3224, Volume 5, Issue 4, pp: 117-122 April, 2018 (A UGC approved Journal).
- **M. K Sarkar** and Sanjay Kumar, "A Survey on Data Storage Security Issues in Cloud Computing", *International Journal of Applied Engineering Research*, ISSN: 0973-4562, Volume 13, Issue 8, pp: 8390-8406, April, 2018, DOI: [https://www.ripublication.com/ijaer18/ijaerv13n10\\_150.pdf](https://www.ripublication.com/ijaer18/ijaerv13n10_150.pdf) (**Scopus, ICI indexed**)
- **M. K Sarkar**, R. Das and Dr. V S Dhaka "A Symmetric Key Based Framework for Data Security in Cloud Computing", *International Journal of Advanced Networking and Applications*, Feb-2015, ISSN: 0975-0282, pp:129-134, DOI: <https://www.ijana.in/sp-7.php>, (A UGC approved Journal).
- T Chatterjee, **M. K Sarkar** and Dr. V S Dhaka "Steganographic Approach to Ensure Data Storage Security in Cloud Computing Using Huffman Coding (SAHC)", *IJCSN International Journal of Computer Science and Network*, ISSN: 2277-5420, Volume 4, Issue 2, pp:198-207, April 2015. (A UGC approved Journal). DOI: [https://ijcsn.org/IJCSN-2015/4-2/Steganographic-Approach-to-Ensure-Data-Storage-Security-in-Cloud-Computing-Using-Huffman-Coding-\\_SAHC\\_.pdf](https://ijcsn.org/IJCSN-2015/4-2/Steganographic-Approach-to-Ensure-Data-Storage-Security-in-Cloud-Computing-Using-Huffman-Coding-_SAHC_.pdf)

- **M. K Sarkar** and T. Chatterjee, "Enhancing Data Storage Security in Cloud Computing Through Steganography", *ACEEE International Journal on Network Security*, ISSN: 2152-5064, Vol. 5, Issue. 1, pp: 13-19, Jan 2014. (A UGC approved Journal), DOI: <https://www.slideshare.net/ideseditor/3-31238231>.
- **M. K Sarkar**, T. Chatterjee and D. Mukherjee, "Reverse Engineering: An Analysis of Static Behavior of Object-Oriented Programs by Extracting UML Class Diagram", *International Journal of Advanced Computer Research*, ISSN: 2249-7277, Vol. 3, Issue 12, pp: 135-141, Sept. 2013, <https://accentsjournals.org/paperInfo.php?journalPaperId=593&countPaper=10949>
- **M. K Sarkar** and T. Chatterjee, "Reverse Engineering: An Analysis of Dynamic Behavior of Object-Oriented Programs by Extracting UML Interaction Diagram", *International Journal of Computer Technology & Applications*, ISSN: 2229-6093, Vol. 4, Issue 3, pp. 378 -383, May-June 2013, DOI: <https://www.oalib.com/journal/10631/11/https://www.semanticscholar.org/paper/Reverse-Engineering%3A-An-Analysis-of-Dynamic-of-by-Sarkar-Chaterjee/017d80a73e76d4627e9bb784d0d0ca43864c139d>
- T. Chatterjee and **M. K Sarkar**, "Sixth Sense Technology Has Potential to Become the Ultimate "Transparent" User Interface for Accessing Information about Everything Around Us", *International Journal of Report and Opinion*, ISSN: 1553-9865, Vol. 5, Issue 4, pp:1-7, ISSN: April 2013, DOI: <https://www.sciencepub.net/report/report0504/>

## CONFERENCE PUBLICATION

- **Pramod S. Rathore, M. K Sarkar**, " Enhancing Wireless Sensor Network Security Against Wormhole Attacks with Two fish Encryption", Global Conference on Applications of Artificial Intelligence and Data Science (AAIDS-2024), Imperial College London, United Kingdom, 3-5<sup>th</sup> April' 2024, **Scopus**, CCIS series of Springer, DOI: **Accepted**
- S. Srivastava, M. K. Sarkar and C. Chakraborty, "GloVe-LSTM: An Artificial Attention Based Algorithm for Sentiment Analysis of Pandemic Times for Enhanced Decision Support", Global Conference on Applications of Artificial Intelligence and Data Science (AAIDS-2024), Imperial College London, United Kingdom, 3-5<sup>th</sup> April' 2024, **Scopus**, CCIS series of Springer, DOI: **Accepted**
- S. Srivastava, **M.K Sarkar** and C. Chakraborty, " Machine Learning Approaches for COVID-19 Sentiment Analysis: Unveiling the Power of BERT", 14<sup>th</sup> IEEE Annual Computing and Communication Workshop and Conference (CCWC-2024), University of Nevada, Las Vegas, USA, 8-10<sup>th</sup> January' 2024, **Scopus**, IEEE Xplore: DOI: 10.1109/CCWC60891.2024.10427866
- Pramod S. Rathore, **M. K Sarkar**, " Defending Against Wormhole Attacks in Wireless Networks Using the Twofish Algorithm: A Performance Analysis", 14<sup>th</sup> IEEE Annual Computing and Communication Workshop and Conference (CCWC-2024), University of Nevada, Las Vegas, USA, 8-10<sup>th</sup> January' 2024, **Scopus**, IEEE Xplore: DOI: 10.1109/CCWC60891.2024.10427928
- S. Srivastava, **M. K. Sarkar**, C. Chakraborty, Enhancing Sentiment Analysis of Robotics Using Advanced Machine Learning Techniques", International Conference on Robotics and Cyber Physical Machines, CBIT, Hyderabad, India, 28-29<sup>th</sup> April' 2023, (**Scopus**: Taylor & Francis), DOI: (Accepted: In Press)
- Pramod S. Rathore, **M. K Sarkar**, "Energy Efficiency using LEACH and ECSS based optimization" 11<sup>th</sup> IEEE International Conference on Internet of Everything, Microwave Engineering, Communication and Networks (IEMECON-2023), UEM Jaipur, Jaipur, India, 10-11<sup>th</sup> February' 2023, IEEE Xplore: DOI: <https://ieeexplore.ieee.org/document/10092337>.
- S. Koner, P. Mitra, S Nayak, S. Kar, S. Bal, **M. K. Sarkar** "Credit Card Fraud Detection using AI Technique", Third Annual International Conference on Data Science, Machine Learning and Blockchain Technology (AICDMB-2022), Vidyavardhaka College of Engineering, Mysuru, India, 16-17<sup>th</sup> February' 2022, IOP Conference Series.
- S. Kumar, D. Das, Rupayan Das, **M. K Sarkar**, "Fuzzy-based On-demand Multi-node Charging Scheme To Reduce Death Rate Of Sensors In Wireless Rechargeable Sensor, Networks" 10<sup>th</sup> IEEE International Conference on Internet of Everything, Microwave Engineering, Communication and Networks (IEMECON-2021), Birla Auditorium, Jaipur, India, 1-2<sup>nd</sup> December' 2021, IEEE Xplore: DOI: <https://ieeexplore.ieee.org/document/9689198>.
- Md Jamil Moatasimbillah, Nabanit Saha, Ratul Dey, **M. K Sarkar**, Sanjay Kumar "Star Topology Implementation For Wireless Sensor Network: An Approach" 2018 IEEE 12th INDIACom International Conference on Computing for Sustainable Global Development, Bharati Vidyapeeth, Delhi, India, 14-16<sup>th</sup> March' 2018, IEEE Xplore: DOI: <http://bvicam.in/INDIACom/news/INDIACom%202018%20Proceedings/Main/index.html>, ISSN 0973-7529; ISBN 978-93-80544-28-1.
- Rupayan Das, **M. K Sarkar**, Sanjay Kumar "LTC: A Location Based Cluster Head Selection Scheme in Wireless Sensor Network" 12<sup>th</sup> IEEE INDIACom International Conference on Computing for Sustainable Global Development, Bharati Vidyapeeth, Delhi, India, 14-16<sup>th</sup> March' 2018, IEEE Xplore: DOI: [https://www.researchgate.net/publication/328199063\\_Ltc\\_A\\_Location\\_and\\_Trust\\_Based\\_cluster\\_head\\_selection\\_scheme\\_in\\_Wireless\\_Sensor\\_Network](https://www.researchgate.net/publication/328199063_Ltc_A_Location_and_Trust_Based_cluster_head_selection_scheme_in_Wireless_Sensor_Network), ISSN 0973-7529; ISBN 978-93-80544-28-1.
- R. Das, **M. K Sarkar**, M. Singh, Sanjay Kumar, "ACAFP: Asymmetric Key based Cryptographic Algorithm using Four Prime Numbers to Secure Message Communication: A Review on RSA Algorithm" 8<sup>th</sup> IEEE Annual Industrial Automation and Electromechanical Engineering Conference (IEMECON-2017), Chulalongkorn University, Bangkok, Thailand, 16-18<sup>th</sup> Oct.' 2017, IEEE Xplore: <https://ieeexplore.ieee.org/abstract/document/8079618>
- S. Bal, R. Das, **M.K Sarkar**, S. Das, D. Majumder, A. Chakraborty and K. Majumder "Performance analysis of various attacks under AODV on proposed WSN & MANET using OPNET 14.5" 7<sup>th</sup> IEEE Annual

Ubiquitous Computing, Electronics & Mobile Communication Conference (UEMCON-16) Columbia University, New York, USA, 22-24<sup>th</sup> Oct.' 2016, IEEE Xplore, pp:1-9, DOI: <https://ieeexplore.ieee.org/document/777783>.

- **M. K Sarkar** and Dr. Sanjay Kumar, "A Framework to Ensure Data Storage Security in Cloud Computing" 2016 IEEE 7th Annual Ubiquitous Computing, Electronics & Mobile Communication Conference (UEMCON-16) Columbia University, New York, USA, 22-24<sup>th</sup> Oct.' 2016, IEEE Xplore, pp: 1-4, DOI: <https://ieeexplore.ieee.org/abstract/document/7777827>
- **M. K Sarkar** and Dr. Sanjay Kumar, "Ensuring Data Storage Security in Cloud Computing Based on Hybrid Encryption Schemes" 4<sup>th</sup> IEEE International Conference on Parallel, Distributed and Grid Computing (PDGC-2016) JUIT, Shimla, India, 22-24<sup>th</sup> Dec' 2016, IEEE Xplore, ISBN: 978-1-5090-3669-1, DOI: <https://ieeexplore.ieee.org/document/7913169>
- R. Raj Gupta, **M. K Sarkar**, Sanjay Kumar, "Data Storage Security in Cloud Computing Using Container Clustering" 7<sup>th</sup> IEEE Annual Ubiquitous Computing, Electronics & Mobile Communication Conference (UEMCON-16) Columbia University, New York, USA, 22-24<sup>th</sup> Oct.' 2016, IEEE Xplore, pp:1-7, DOI: <https://ieeexplore.ieee.org/document/7777913>
- M. Singh, R. Das, **M. K Sarkar**, K. Majumder, S. K Sarkar" KT3F: A Key based Two Tier Trust Management Filtering Scheme for Intrusion Detection in Wireless Sensor Network" in International Conference on Computer and Communication Technologies (IC3T-2015) CMR Technical Campus, Bangalore, India, 24-26<sup>th</sup> July' 2015, Springer, pp: 679-690, DOI: [https://link.springer.com/chapter/10.1007/978-81-322-2517-1\\_65](https://link.springer.com/chapter/10.1007/978-81-322-2517-1_65)
- **M. K Sarkar** and R. Das, Dr. V S Dhaka "A Symmetric Key Based Framework for Data Security in Cloud Computing", in National Conference on Current Research Trends in Cloud Computing & Big Data (CRTCCBD-2015), Jaipur National University, Jaipur, India, 6-7<sup>th</sup> Feb.' 2015, Jaipur, India, pp:129-134, DOI: <https://www.ijana.in/sp-7.php>

### BOOK CHAPTER

- "A Book Chapter on Strategies and Challenges in Securing Wireless Networks Against Wormhole Intrusions", in Artificial Intelligence for Blockchain and cybersecurity powered IoT Applications (**Scopus**), CRC Press.
- "A Book Chapter on Combating Cyber Threats Including Wormhole Attacks in Healthcare Cyber-Physical Systems: Advanced Prevention and Mitigation Techniques", in AI & Cyber Security in Healthcare Cyber Physical System (**Scopus**), Scrivener Publishing LLC Wiley.

### CERTIFICATION COURSE COMPLETED

- Introduction to Big Data by University of California San Diego.
- Big Data Modeling and Management Systems by University of California San Diego.
- Big Data Integration and Modeling by University of California San Diego.
- Machine Learning with Bigdata by University of California San Diego.
- Graph Analytics for Big Data by University of California San Diego.
- Managing Big Data with SQL by University of California San Diego.

### WORKSHOP/SEMINAR/FDP ATTENDED

- Data Science with Python (Online Live FDP) conducted by ICT Academy on 23 Apr 2020 to 29 Apr 2020
- Introduction to Cloud Computing (Online Live FDP) conducted by ICT Academy on 30 Apr 2020 to 05 May 2020.
- 84th International Conference & HR Congress on Employment Scenario post COVID-19, by University of Engineering & Management Jaipur, May 23, 2020.
- IEEE UEM Distinguished Foreign Lecture on Energy Storage and Efficiency, Dr. Rufer Alfred, ETH Zurich, Switzerland on May 30, 2020.
- 89th International Web Conference & HR Congress on June 27, 2020.
- IEEE UEM Distinguished Foreign Lecture on Big Data Analytics for Precision Medicine, Dr. George Palioras, Greece on July 29, 2020.
- UEM Jaipur IEEE Foreign lecture on Reflectionless Filters by Dr. Matthew Morgan, Scientist, National Radio Astronomy Observatory, USA on 20th July'2020.
- IEEE-UEM Jaipur Distinguished Lecture on Interactive Learning in Antena Design, TraNG 19.1 Swapnil Gaul, Founder, NUMERGION. on July 7, 2020.
- UEM Jaipur hands on Workshop on Virtual reality and Augmented Reality on 10th July'2020.
- IEM-UEM Foreign Lecture on Elements of Medical Informatics by Dr. Heloise Greef and Dr. Yvonne Lu, Oxford University, UK. On 4th August.
- Completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on "Artificial Intelligence" from 15-06-2020 to 19-06-2020 at FEDERATION OF INDIAN CHAMBERS OF COMMERCE AND INDUSTRY (FICCI).
- Workshop on Examination Reforms" organized by AICTE at Pacific Institute of Technology, Udaipur on 7th Feb'2019.

- Faculty Development program on "Value and Ethics at Workplace", at UEM Jaipur on 8<sup>th</sup> to 12<sup>th</sup> Oct-2018.
- NPTEL SPOC FELICIATION Workshop on 21<sup>st</sup> July 2018 at IIT Kanpur Outreach Centre, Noida.
- Faculty Development program on "Teaching Methodology", at UEM Jaipur on 11<sup>th</sup> to 15<sup>th</sup> Dec-2017.
- Training program on "Water Budgeting & Management at Local Level" by National Ground Water Training & Research Institute, Govt. of India on 2<sup>nd</sup>& 3<sup>rd</sup>, Aug-2017, at UEM Jaipur.
- National Conference on Current Research Trends in Cloud Computing & Big Data - CRTCCBD on Feb 6-7, 2015, Jaipur, India.
- Faculty Development program on "Teaching Pedagogy in Electronics & Communication Engineering", Institute of Engineering and Management, Kolkata, 21-22 Jan, 2015.
- Faculty Development program on "Mentoring the students to make them ready for Corporate and Higher Studies" Institute of Engineering and Management, Kolkata, 12-13 Jan, 2015.
- Organized & attend "Workshop on Image Processing" jointly organized by The ICFAI University, Tripura and ISI Kolkata on 14<sup>th</sup> and 15<sup>th</sup> November 2011 at The ICFAI University, Tripura.
- Organized & obtained the position of Treasure of my College fest 'JAGRITI-2007'.
- 1 Month (From 25<sup>th</sup> June 07 to 3<sup>rd</sup> August, 07) in RDBMS Concepts With ORACLE\_9i in IBM ACE
- 2 Months (From Jan 2008 to Feb 2008) IT Training Program in West Bengal Electronics Industry Development Corporation Limited.
- Seminar on Software Engineering & its Application under TEQIP, organized by Govt. College of Engineering & Ceramic Technology, Kolkata.
- Done Yogo from North 24 Parganas B.B & Yoga Association.

## THESIS/DISSERTATION

### Ph.D

Title: A Framework to Ensure Data Storage Security in Cloud Computing Based on Hybrid Encryption Schemes.

Guide: Dr. Sanjay Kumar, Associate Professor, Computer Science & Engineering, Jaipur National University, Jaipur

Objectives: The main objectives summarized as the following aspect:

- Identifying the major data storage security issues in cloud computing.
- Analysis of different security approaches of cloud computing data storage.
- Introduce a Framework based on hybrid encryption scheme to secure stored data in cloud computing.

### M.Tech

Title: Reverse Engineering: Extracting the Sequence and Class diagram from Java Programs.

Guide: Dr. Rajib Mall, Professor, Computer Science & Engineering, IIT Kharagpur.

### B.Tech:

Title: Private Clinic Management System.

Guide: Mr. Pronay Adak, Assist. Professor, Govt. College of Engineering & Ceramic Technology.

## TRAINING

Organization: **Oracle University**

Duration: Completed Oracle Workforce Development Program on Oracle Database on Feb-2015.

Organization: **WEBEL**

Organization: **IBM ACE**

Duration: 1 Month in RDBMS Concepts With **ORACLE\_9i**.

Organization: **WEBEL**

Duration: 2 Months IT Training Program from West Bengal Electronics Industry Development Corporation Limited.

Organization: **Technaissance**

Duration: 2 Months on JSP, Servlets and MYSQL

## PERSONAL DETAILS

Name : Mrinal Kanti Sarkar,  
 Father's Name : Late Haridas Sarkar  
 Marital Status : Married, Sex: Male  
 Nationality : Indian

## PERMANENT ADDRESS

Vill-Kamalapur, P.O-Purba Nehalpur (Dhanyakuria), P.S-Matia, Dist.-North 24 PGS, West Bengal, India-743437

## LANGUAGES KNOWN

- ENGLISH (R/W/S), HINDI(R/S), BENGALI(R/W/S).

## INTERESTS

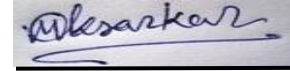
- Net Surfing, Collection of Book, Travelling, Listening Music, Singing Song.

## REFERENCES

- **Dr. Rajib Mall**, Professor, Department of Computer Science & Engineering, Indian Institute of Technology, Kharagpur (W.B). Email: rajib@cse.iitkgp.ernet.in
- **Dr. Sanjay Kumar**, Associate Professor, School of Engineering and Technology, Jaipur National University, Jaipur, Email: sanjaysatyam786@gmail.com
- **Dr. Pradip Kumar Sharma**, Registrar, University of Engineering & Management Jaipur, Rajasthan. Email: pradipk.sharma@uem.edu.in
- **Dr. Anirudh Mukherjee**, Dean, University of Engineering & Management Jaipur, Rajasthan. Email: mukherjeeanirudh73@gmail.com

## DECLARATION

I hereby declare that the above-mentioned information is correct up to my knowledge and I bear the responsibility for the correctness of the above-mentioned particulars.



**Dr. Mrinal Kanti Sarkar**

**Date: 29/06/2024**