

## **Dr. SASWATI MUKHERJEE – ACTIVITY DETAILS**

### **RESEARCH ACTIVITIES**

- 2019 - 2020 Principal Investigator, project entitled “Deep learning techniques for Population-level Cardio-Vascular Risk Prediction and Score Generation in Type-2 Diabetes Mellitus” under RUSA 2.0 sponsored project
- 2019 – 2021 Co-Investigator, project entitled “Cosmic Quest” in collaboration with Vigyan Prasar, an autonomous organization under the Department of Science & Technology, Govt. of India
- 2012 – 2019 Education Technologist, project entitled “Web Based Teaching Material Development for UG and PG engineering laboratories” funded University with Potential for Excellence - Phase II
- 2009 – 2010 Co- Principal Investigator, project entitled "Studies in Wireless and Mobile Networks: Aspects of Multicasting, Optimization and Security" funded by Interra Systems (I) Pvt. Ltd

### **ACADEMIC ACTIVITIES**

- November 29, 2019 Delivered lecture on Artificial Intelligence in Healthcare- Promises & Prospects in the 11th Annual National Conference of Indian Society for Rational Pharmacotherapeutics (ISRPTCon2019), Science City, Kolkata
- June 18 – 22, 2019 Participated in Continuing Education & Quality Improvement Programmes (CE & QIP) course on Deep Learning: From Basics to Practice conducted by IIT Bombay
- September 10 -12, 2018 Participated in Continuing Education & Quality Improvement Programmes (CE & QIP) course on IT Enabled Learning for STEM conducted by IIT Bombay
- March 2018 – August 2018 Program Coordinator in 6 months certificate course on Multimedia Development & Applications, School of Education Technology, Jadavpur University
- January 17, 2018 Coordinator in Half-Day National Seminar on Multimedia Development & Applications, School of Education Technology, Jadavpur University

December 1 - 22, 2017	Delivered lectures on Multimedia Based Educational Content Creation on Understanding ICT for Professional Development in Education, Department of Information Technology, Jadavpur University
Feb 27 – March 1, 2014	Attended International Conference on Applications and Innovations in Mobile Computing organized by School of Education Technology, Jadavpur University
January 14 - 19, 2013	Attended One- week Training Program cum Workshop on Recent Advances in Wireless and Mobile Computing and Communication, School of Mobile Computing and Communication, Jadavpur University, Kolkata
December 17 -19, 2011	Attended 7 <sup>th</sup> International Conference on Information Systems Security organized by Centre for Distributed Computing, Jadavpur University, Kolkata
March 10, 2011	Logistics Support Coordinator in One-Day National Seminar on New Paradigms in Open Learning, School of Education Technology, Jadavpur University
March 11-12, 2011	Delivered lectures on Learning Management System in Two-day Workshop on Content Generation Using Open Source Tools, School of Education Technology, Jadavpur University
January 3 – 6, 2010	Attended 11 <sup>th</sup> International Conference on Distributed Computing and Networks organized by department of Computer Science & Engineering, University of Calcutta
December 14 -18, 2009	Attended 5 <sup>th</sup> International Conference on Information Systems Security, Jadavpur University, Kolkata
July 23, 2009	Logistics Support Coordinator in One-Day National Seminar on Technology Enhanced Learning, School of Education Technology, Jadavpur University
July 24- 25, 2009	Delivered lectures on 2D Flash Animation in Two-day Workshop on E-content Design & Development, School of Education Technology, Jadavpur University
March 18, 2008	Attended One-day Seminar on "IT-enabled Education and Intelligent Tutoring" on March 18, 2008 organized by St. Thomas' College of Engineering & Technology

## PUBLICATIONS - CONFERENCE

1. Sharthak Mallik, Shovan Halder, Pranay Saha, and Saswati Mukherjee, Multi-factor Authentication-based E-Exam Management System (EEMS), International Conference on Frontiers in Computing and Systems (COMSYS-2020), Springer, January 13 – 15, 2020.
2. R. Dhar, S. Mukherjee, “Android-based text reader for partial vision impairment”, Fifth International Conference on Electrical, Electronics & Computer Engineering, IEEE, Nov 2-4, 2018
3. K. Hossain, S. Jana, S. Mukherjee, R. Parekh, “A novel approach to secure biomedical images and videos for transmission”, 3rd International Conference on Research in Computational Intelligence and Communication Networks (ICRCICN-2017), IEEE, pp. 120 – 125, November 3 – 5, 2017
4. K. Hossain, S. Jana, S. Mukherjee and R. Parekh “Secured transmission of sensitive images of skin diseases using steganography and cryptography”, 2017 IEEE Calcutta Conference, (CALCON), pp. 95 – 99, December 2 -3, 2017
5. S. Mukherjee, M. Chattopadhyay, and S. Chattopadhyay, “A novel encounter based trust evaluation for aodv routing in manet”, in 2<sup>nd</sup> International Conference on Applications and Innovations in Mobile Computing (AIMoC), IEEE, pp. 141-145, 2015.
6. C Patra, M Chattopadhyay, P Bhaumik, M Bhattacharya, S Mukherjee, “A reliable two-tier energy-efficient topology building algorithm for Wireless Sensor Networks”, in International Conference on Applications and Innovations in Mobile Computing (AIMoC), IEEE, pp. 146 – 150, 2014
7. S. Mukherjee, M. Chattopadhyay, S. Chattopadhyay, D. K.Sanyal, R. Neogy, and S. Pal, “A novel incentive based scheme to contain selective forwarding in wireless sensor network”, in 12<sup>th</sup> IFIP International Conference on Computer Information Systems and Industrial Management, pp. 301 - 312, Springer, 2013
8. S. Mukherjee, M. Chattopadhyay, A. Lahiri, and S. Chattopadhyay, “An efficient binary playfair algorithm using a 4x4 playfair key matrix”, in 11<sup>th</sup> IFIP International Conference on Computer Information Systems and Industrial Management, pp. 314 - 325, Springer, 2012
9. S. Mukherjee, S. Dey, R. Mukherjee, M. Chattopadhyay, S. Chattopadhyay, and D. K. Sanyal, “Addressing forwarders dilemma: A game-theoretic approach to induce cooperation in a multi-hop wireless network”, in 3<sup>rd</sup> International Conference on Advances in Communication, Network, and Computing, pp. 93 - 98, Springer, 2012
10. S. Mukherjee, M. Chattopadhyay, S. Chattopadhyay, P. Bose, and A. Bakshi, “Detection of selective forwarding attack in wireless ad hoc networks using binary search”, in 3<sup>rd</sup> International Conference on Emerging Applications of Information Technology (EAIT), pp. 382 - 386, IEEE, 2012
11. S. K. Ghosal, A. Nath, S. Mukherjee, A. Acharya,” A new approach: Data hiding and security of multimedia content using steganography”, UGC Sponsored National Conference on Image Processing (NCIMP 2010), ISBN-978-81-8424-574-5, pp. 253-256, 2010

12. S. K. Ghosal, S. Mukherjee, "An enhanced secure and comprehensive data hiding approach using 24 bit color images" in 2<sup>nd</sup> International Conference on Advanced Computing & Communication (ICACC 2010), pp. 61 – 65, 2010
13. S. Mukherjee, S. K. Ghosal, M. Chattopadhyay, "A novel approach: Data hiding and security of multimedia content using steganography", Proceedings of the National Conference on Emerging Trends in Computer Science & Information Technology (ETCSIT 2010), Nashik, Maharashtra, pp. 133 – 137, 2010

**PUBLICATION - JOURNAL**

1. S. Mukherjee, M. Chattopadhyay, S. Chattopadhyay, and P. Kar, "Wormhole detection based on Ordinal MDS using RTT in wireless sensor network", Journal of Computer Networks and Communications, vol. 2016, 2016
2. P. Chandra, S. Chanda and S. Mukherjee, "Student classroom performance analysis and remodeling with the help of a new architecture in a cost effective manner", Imperial Journal of Interdisciplinary Research, vol. 2, issue 6, 2016
3. S. Mukherjee, M. Chattopadhyay, and S. Chattopadhyay, "A key re-distribution and authentication based technique for secured communication in clustered wireless sensor networks with node mobility", International Journal of Computer Networks and Communications, vol. 2, no. 6, pp. 104 - 115, 2010

**PUBLICATION – BOOK CHAPTER**

1. S. Mukherjee, M. Chattopadhyay, S. Chattopadhyay, and P. Kar, "EAER-AODV: Enhanced trust model based on average encounter rate for secure routing in MANET", in 4th International Doctoral Symposium on Advanced Computing and Systems for Security, Springer, 2017.
2. Lovely Chatterjee, Saswati Mukherjee, Matangini Chattopadhyay, "A personalized mobile application using location-based service" published in "Advances in Computer Science and Education Applications", Communications in Computer and Information Science (CICS), Volume 202, Springer, pp 413 – 419, 2011.