One Day Workshop on

Recent Trends in IoT and its Applications

Organized by Department of Computer Science and Engineering, Aliah University, Kolkata

Date: 20th February, 2023

Title of Talks

Overview of IoT-Cloud based System for Societal Applications

By Sarbani Roy, Professor, Department of Computer Science & Engineering Jadavpur University

IoT and its key technologies

By Nandini Mukherjee, Professor, Department of Computer Science & Engineering Jadavpur University

Understanding the Internet of Things and its Application

By Indrajit Banerjee, Associate Professor, Department of Information Technology IIEST Shibpur

Building IoT Solutions: A Hands-On Journey from Sensor Nodes to the IoT Cloud

By Soumyadeep Sur, Research Scholar, Department of Computer Science & Engineering Jadavpur University

Speakers

Sarbani Roy

Sarbani Roy is a Professor in the Department of Computer Science and Engineering, Jadavpur University, Kolkata. She obtained her M.Tech in Computer Science and Engineering from University of Calcutta, India in 2002. She received her Ph.D. degree in Engineering from Jadavpur University, Kolkata, India in 2008. She was awarded Fulbright-Nehru Senior Research fellowship in 2013-2014 and joined the research program at University of North Carolina, Charlotte, USA. Her research interests include AI for Social Good, IoT-Cloud, Social Network Analysis, Geoinformatics and Data Science. She has published SCI/SCIE journals including IEEE and ACM Transactions, Scientific Reports Nature and conferences, several of which are in reputed international venues. She has co-authored one book, Building Wireless Sensor Networks: Theoretical and Practical Perspectives (CRC Press). She has received project grants from DSTNGP, Govt. of India and DSTBT, Govt. of West Bengal. She has been involved in technical program committees, organizing committees for many international conferences. She is a senior member of IEEE, Chairperson of IEEE Computer Chapter, Kolkata Section and member of ACM.

Nandini Mukherjee

Nandini Mukherjee is a Professor and currently the head of the Department of Computer Science and Engineering, Jadavpur University, Kolkata. She is an academician as well as a scientist. She earned her Bachelor of Engineering Degree from the Department of Computer Science and Technology of Bengal Engineering College under Calcutta University, Shibpur in 1987 and obtained her Master of Engineering degree from the Department of Computer Science and Engineering, Jadavpur University, in 1991. Prof. Mukherjee began teaching in the Computer Science and Engineering Department at Jadavpur University in 1992. In 1996 she was awarded the prestigious Commonwealth scholarship for her PhD at the University of Manchester, in the UK. As of 2016 she was also the Director of the University's School of Mobile Computing.

She has more than 30 yrs of teaching experiences and during this long period she has supervised many PhD students. Her research fields include Parallel Computing, Grid Computing, Wireless Sensor Networks (WSN), IoT and sensor cloud. She has published more than 250 research articles in SCI/SCIE journals including IEEE and ACM Transactions, and conferences, several of which are in reputed international venues. She has co-authored one book, entitled Building Wireless Sensor Networks: Theoretical and Practical Perspectives (CRC Press). She has supervised research projects funded by different agencies of the Government of India. Prof. Mukherjee leads a collaborative research project to investigate the application of mobile computing and wireless sensor networks to Indian rural health systems.

Other than being an academician and a scientist, she is involved in several social activities. Prof. Mukherjee became the State Secretary of the Free Software Mancha of West Bengal. She is the Joint Secretary of the Jadavpur University Teachers' Association (JUTA) and an active member of the West Bengal College and University Teachers' Association (WBCUTA).

Indrajit Banerjee

Dr Indrajit Banerjee is currently an Associate Professor in the Department of Information technology at Indian Institute of Engineering Science and Technology, Shibpur. Dr. Banerjee obtained his PhD from the Bengal Engineering and Science University, Shibpur in 2014. He received the Chester Sall Award from IEEE Transactions on Consumer Electronics, the USA, in 2016 and 2022 and received several best paper awards. His research interest include IoT, WSN, Cloud Computing and Security. Under his guidance, several students have completed their PhD. Dr Banerjee has conducted numerous research projects sponsored by MOIL India, DST India, WB DHESTB, AICTE, UGC, to name a few. He is the reviewer of various International Journals including IEEE Transactions on Vehicular Technology, IEEE Internet of Things Journal, Computer communication Elsevier, AdHoc Network Journals, among many others. He has patents on different IoT devices and has several copyrights on related software.

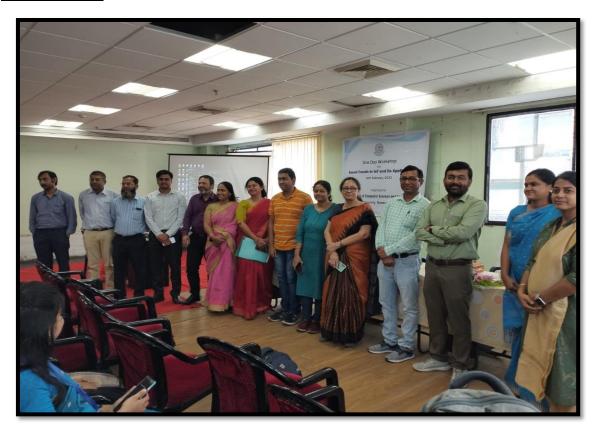
Soumyadeep Sur

Soumyadeep Sur is currently а research scholar at Jadavpur University. Apart from being a researcher he is also an IoT developer.Mr. Sur holds a BSc(H) in Computer Science from Surendranath College, and a M.Sc and M.Tech in Computer Science from the Department of Computer Science and Engineering, University of Calcutta. His passion for IoT has led him to explore a range of topics, from sensor device prototyping to wireless communication and IoT cloud. Mr. Sur has keen interest in finding new and innovative ways to leverage the power of IoT to solve real-world problems. Mr. Sur has also completed a certification program in "Open Hardware Based Communicable Digital Bio Sensing Platform" organized by the University of Calcutta and IIM Kolkata, in the year 2018 which helped him to develop a deep understanding of the technical aspects of building IoT devices.

Attendance

Number of Participants: 75

Snapshots



All Faculty Members with Speakers



Participants



Demonstration of IoT Cloud by Soumyadeep Sur



Talk given by Prof. Nandini Mukherjee



Aliah University IIA/27, New Town, Kolkata-700160 www.aliah.ac.in

One Day Workshop on Recent Trends in IoT and its Applications

20th February, 2023

The workshop intends to enhance the knowledge & skills of students and researchers in the area of IoT and its applications. In recent times, Internet of Things (IoT) has emerged as a popular and efficient technology with the rapid advancement in wireless communications and digital electronics technology. Internet of Things technologies allows communication with the analog world around us (that includes machines, people, animals, plants, things) in a digital way. This workshop will help participants to enhance their understanding over this concept and enlighten the scope of work on this field.

This workshop is intended for research scholars and UG/PG students.

Prof. Sk Abu Taher Kamruddin Hon'ble Vice Chancellor, **Aliah University**

Dr. Syed Nurus Salam Registrar, Aliah University

Chief Guest Prof. Babulal Seal Dean, Faculty of Science and Technology Aliah University

Selection will be done based on First-cum-First served basis.

Dr. Souvik Sengupta, Associate Professor & Head, Department of CSE, Aliah University

Eminent Speakers

1. Prof. Nandini Mukherjee Professor and Head, Department of Computer Science & Engineering, Jadavpur University, Kolkata

2. Prof. Sarbani Roy Professor, Department of Computer Science & Engineering, Jadavpur University, Kolkata

3. Dr. Indrajit Banerjee Associate Professor, Department of Information Technology, Indian Institute of Engineering Science and Technology, Shibpur

4. Soumyadeep Sur Research Scholar, Department of Computer Science & Engineering, Jadavpur University, Kolkata

Important Dates

Last date for receiving complete application form: February 16, 2023 till 5 pm.

To complete the registration process follow the link below: Registration Link - https://forms.gle/zW5FNQxqNtZBicK7

basis. Maximum number of participants: 75

REGISTRATION FEES (to be paid online) (INCLUSIVE OF REGISTRATION KIT, WORKING LUNCH AND HIGH TEA) Student / Research Scholar: Rs. 100/-

Certificates will be provided to the registered participants after successful completion of the programme.

Venue Seminar Room, 3rd Floor, New Town Campus, Aliah University

Contact person Dr. Zeenat Rehena zeenatrehena@aliah.ac.in 7003481581

Coordinator Dr. Zeenat Rehena, Asst. Prof., CSE, AU

Joint coordinator Dr. Nashreen Nesa, Asst. Prof., CSE, AU

> Secretary Moumita Chatterjee, Asst. Prof., CSE, AU

Committee :
All faculties and staffs
of Department of CSE,
Aliah University

Treasurer Amina Khatun Asst. Prof., CSE, AU

Broucher of the Workshop

One Day Workshop on Recent Trends in IoT and its Applications 20th February, 2023

PROGRAMME SCHEDULE

ltem	Time	Agenda	Speaker
1.	9:30 – 10:30 AM	REGISTRATION	
2.	10:30 – 11:00 AM	Inaugural Session	Opening remarks by Hon'ble Vice Chancellor, Registrar, Dean (Faculty of Science & Tech.) and Head of the Department, CSE
3.	11:00 – 11:15 AM	HIGH TEA	
4.	11:15 – 12:15 PM	Session 1: Talk 1	By Prof. Nandini Mukherjee, Professor, Jadavpur University, Kolkata
5.	12:15 – 1:15 PM	Session 1: Talk 2	By Prof. Sarbani Roy, Professor, Jadavpur University, Kolkata
6.	1:15 – 2:15 PM	LUNCH BREAK	
7.	2:15 - 3:15 PM	Session 2: Talk 3	By Dr. Indrajit Banerjee, Associate Professor, IIEST, Shibpur
8.	3:15 - 4:30 PM	Session 2: Hands-on demonstration	By Soumyadeep Sur, Research Scholar, Jadavpur University, Kolkata
9.	4:30 - 5.00 PM	VALEDICTORY	