EECS RESEARCH STUDENTS SYMPOSIUM - 2023

Date: 3rd and 4th April, Venue: IISc Bengaluru

April 3rd, 2023 (Monday)

| 09:20 - 09:30 | Welcome Note by Rajesh Sundaresan, Dean, EECS Division, IISc. [ECE Golden Jubilee Hall] | | | | | | |
|---------------------------|--|--|--|--|--|--|--|
| 09:30 - 13:00 | Session 1: Research Cluster talks (Venue: ECE Building) | | | | | | |
| 09:30 - 13:00 | Session 1A: Artificial Intelligence / Machine Learning [ECE Golden Jubilee Hall] | | | | | | |
| | Cluster Coordinator: Shalabh Bhatnagar, Aditya Gopalan | | | | | | |
| | Student Organizer: Rankit, Naman | | | | | | |
| | Faculty Organizer: Gugan Thoppe | | | | | | |
| 11:06 - 11:20 | Coffee break | | | | | | |
| 09:30 - 13:00 | Session 1B: Signal Processing and Communications (SPCOM) [ECE MP 20] | | | | | | |
| | Cluster Coordinator: Neelesh B. Mehta, Sundeep Prabhakar Chepuri | | | | | | |
| | Student Organizer: Anand, Yugesh | | | | | | |
| | Faculty Organizer: Debdeep Sarkar | | | | | | |
| 11:30 onwards | Qualcomm Live Session with Students [ECE 1.09] | | | | | | |
| 13:00 -14:20 | Lunch at the Main Guest House (MGH) for all registered attendees (having food coupons*) | | | | | | |
| *Food coupons can be coll | ected from the physical counter in front of ECE building (until 1pm) | | | | | | |
| 14:20 – 19:20 | Session 2: Faculty Talks and Plenary Talks (Venue: Faculty Hall, Main Building) | | | | | | |
| 14:20 - 15:40 | Faculty Organizer: Punit Rathore, Kiran Kumari | | | | | | |
| | Session Chair: Samar Agnihotri | | | | | | |
| | Student Organizer: Krishna, Ayushi, Rohit Raj | | | | | | |
| | Speaker: Chirag Jain (CDS) | | | | | | |
| | Title: Graph-theoretic models for de novo genome assembly | | | | | | |
| | Speaker: Samir Hazra (EE) | | | | | | |
| | Title: Grid-Forming Inverter for Renewable Energy Resource Integration | | | | | | |
| | Speaker: Sumit Kumar Mandal (CSA) | | | | | | |
| | Title: Energy-efficient 2.5D Architectures with Processing-in-memory for Machine Learning Applications | | | | | | |
| | Speaker: Pushpak Jagtap (RBCCPS) | | | | | | |
| | Title: Formally verified controllers for cyber-physical systems | | | | | | |
| 15:40 - 16:00 | Coffee break | | | | | | |

| 16:00 - 17:00 | Session Chair: Siddhartha Gadgil | | | |
|--------------------------|---|--|--|--|
| | Faculty Organizer: Gugan Thoppe, Vaanathi Sundaresan | | | |
| | Student Organizer: Krishna, Ayushi, Rohit Raj | | | |
| | Plenary speaker: Kevin Buzzard, Professor, Imperial College London, UK | | | |
| | Talk Title: Mathematics and the Computer | | | |
| 17:00 - 17:20 | High Tea break for all registered attendees | | | |
| 17:20 - 18:20 | Plenary speaker: Abhay Karandikar, Director, IIT Kanpur, India | | | |
| | Talk Title: My experiments with Innovation, Incubation and leadership roles in telecom and academia | | | |
| 17:20 - 18:00 | Faculty Organizer: Utsav Banerjee, Debdeep Sarkar | | | |
| | Student Organizer: Sourav Mazumdar, Suraj Mahadev | | | |
| | Speaker: Balaswamy Vepula (ECE) | | | |
| | Title: Wavelength agile fiber lasers | | | |
| | Speaker: Viveka K R (ESE) | | | |
| | Title: Energy-Efficient Computation in Constrained Systems with Machine Learning Workloads | | | |

April 4th, 2023 (Tuesday)

| 9:00 – 13:30 | Session 3: Plenary Talk (Faculty Hall) and Research Cluster talks (ECE building) | | | | | |
|----------------|---|--|--|--|--|--|
| 9:00 - 10:00 | Session Chair: Bhavana Kanukurthi | | | | | |
| (Faculty Hall) | Faculty Organizer: Kiran Kumari | | | | | |
| | Student Organizer: Subhadeep, Sourav Mazumdar, Abhay | | | | | |
| | Plenary speaker: Nivruti Rai, Country Head, Intel India | | | | | |
| | Talk Title: Perspectives on building a successful Systems Foundry | | | | | |
| 10:00 - 10:20 | Coffee break at Faculty Hall and Proceed to ECE building for Research Cluster talks | | | | | |
| 10:20 -13:30 | Session 3A: Theoretical Computer Science [ECE 1.07] | | | | | |
| (ECE Building) | Cluster Coordinator: Arindam Khan | | | | | |
| | Student Organizer: Meenaly, Jayant | | | | | |
| | Faculty Organizer: Gugan Thoppe | | | | | |
| | Session 3B: Cyber-Physical Systems [ECE MP-30] | | | | | |
| | Cluster Coordinator: Pushpak Jagtap, Pavankumar Tallapragada | | | | | |
| | Student Organizer: Suraj, Harsh | | | | | |
| | Faculty Organizer: Kiran Kumari | | | | | |
| | Session 3C: Security and Privacy [ECE Golden Jubilee Hall] | | | | | |
| | Cluster Coordinator: Vaibhav Katewa, Bhavana Kanukurthi, Navin Kashyap | | | | | |
| | Student Organizer: Moumita, Abhishek | | | | | |

| | Faculty Organizer: Utsav Banerjee | | | | | |
|----------------|---|--|--|--|--|--|
| 12:00 - 12:15 | Coffee break | | | | | |
| 10:20 -13:30 | Session 3D: Artificial Intelligence / Machine Learning [ECE 1.08] | | | | | |
| (ECE Building) | Cluster Coordinator: Yadati Narahari | | | | | |
| | Student Organizer: Rankit, Rohit Prasad | | | | | |
| | Faculty Organizer: Punit Rathore | | | | | |
| | Session 3E: Visual Analytics [ECE MP 20] | | | | | |
| | Cluster Coordinator: Venkatesh Babu, Anirban Chakraborty | | | | | |
| | Student Organizer: Subhadeep, Sourav Mazumdar | | | | | |
| | Faculty Organizer: Vaanathi Sundaresan | | | | | |
| 12:00 - 13:30 | TCS Research Café [ECE 1.09] | | | | | |
| | | | | | | |
| 13:30-14:30 | Lunch at the Main Guest House (MGH) for all registered attendees (having food coupons*) | | | | | |

^{*}Food coupons can be collected from the physical counter in front of ECE building (until 1pm)

April 4th, 2023 (Tuesday)

| 14:30-18:30 | Session 4: Research cluster talks (ECE building) | | | | |
|---------------|---|--|--|--|--|
| 14:30-17:40 | Session 4A: Brain Computation and Data Sciences [ECE Golden Jubilee Hall] | | | | |
| | Cluster Coordinator: Prasanta Kumar Ghosh | | | | |
| | Student Organizer: Aniket, Naman | | | | |
| | Faculty Organizer: Utsav Banerjee | | | | |
| 14:30-17:40 | Session 4B: Microelectronics, RF, and Photonics [ECE MP-20] | | | | |
| | Cluster Coordinator: Srinivas Talabattula, Arup Polley | | | | |
| | Student Organizer: Yashash, Krishna | | | | |
| | Faculty Organizer: Debdeep Sarkar | | | | |
| 16:00-16:15 | Coffee break | | | | |
| 14:30-17:40 | Session 4C: Power Engineering [ECE 1.08] | | | | |
| | Cluster Coordinator: Vishnu Mahadeva Iyer, Samir Hazra | | | | |
| | Student Organizer: Sagnik, Abhishek | | | | |
| | Faculty Organizer: Kiran Kumari | | | | |
| 14:30-17:40 | Session 4D: Computer Systems, Networking and IoT [ECE MP-30] | | | | |
| | Cluster Coordinator: Sathish Vadhiyar, T V Prabhakar | | | | |
| | Student Organizer: Sai Teja, Sudarshan | | | | |
| | Faculty Organizer: Vaanathi Sundaresan | | | | |
| 17:40 - 18:10 | High Tea break for all registered attendees | | | | |
| 18:10 | Best Presentation Award Ceremony at ECE Lunch Hut | | | | |