The Department of Computer Science and Automation (CSA) came into existence as the School of Automation in 1969 and will be celebrating Golden Jubilee (50th Anniversary) from August 1, 2019 to July 31, 2020. As a precursor to the official Golden Jubilee Year, the Department is organizing this one-day program “Road to CSA50” in conjunction with the International Conference on Distributed Computing and Networking (ICDCN 2019) held at IISc on January 4-7. The program consists of two parts: a technical symposium (Event I, 9:30 AM – 4:30 PM) themed “Emerging Computing and Networking” followed by Alumni Celebrations and Get-together (Event II, 5:00 – 8:30 PM).

Event I: 09:30 am - 4:30 pm: “Road to CSA50” Symposium

09:30 - 10:00 am : Meet and Greet Session (Tea/Coffee Break)

10:00 - 10:30 am : Inaugural Session (Chair: Y. N. Srikant)

: CSA History – N. Viswanadham (CSA Emeritus Professor)

: Symposium Welcome – Theme: “Emerging Computing and Networking”
– Deepak D’Souza (CSA Faculty) and Nageswara Rao (Oak Ridge National Lab)

[Each Session will start with a “Distinguished Talk” for 25 mins, including 5 mins Q&A, followed by contributed/invited talks for 15 mins each, including 3 mins Q&A.]

10:30 - 11:45 am : Session I: Emerging Systems/Applications (Chair: Deepak D’Souza)

- Privacy-Utility Tradeoffs (Distinguished Talk)
  H. Vincent Poor (Princeton University, USA)

- Robust Design and Analysis of Cyber-Physical Systems
  Pavithra Prabhakar (Kansas State University, USA)

- Resource Sharing in Challenged Opportunistic Environments
  Mohan Kumar (Rochester Institute of Technology, USA)

- Semantic Web Technologies and Applications
  P. Srinivasa Kumar (IIT Madras, India)
11:45 - 12:00 pm: Networking Break

12:00 – 01:00 pm : Session II: Network Algorithms (Chair: Shirish Shevade)
- Tailored Network Design: Building Graph to Specification (Distinguished Talk)
  David Peleg (The Weizmann Institute, Israel)
- Configuration Management for Resilient Networked Systems
  Ravindran Kaliappa (City University of New York, USA)
- CSA@100: A Future Retrospective
  Swami Manohar (Microsoft Research India Lab)

01:00 - 02:00 pm : Lunch

02:00 - 03:00 pm : Session III: Technology Innovation (Chair: Chiranjib Bhattacharyya)
- Smart and Advanced Manufacturing Innovation (Distinguished Talk)
  Sudarsan Rachuri (Department of Energy, USA)
- Guiding Technology Creation Through the Market Compass
  Srin Rajam (Ittiam Systems, India)
- Computer Science and Engineering Education in India
  C. P. Ravikumar (Texas Instruments, India)

03:00 - 03:15 pm : Networking Break

03:15 - 04:30 pm : Session IV: Advanced Computing Methods (Chair: R. K. Shyamasundar)
- Self-managing Network Topologies (Distinguished Talk)
  Sukumar Ghosh (University of Iowa, USA)
- Finite-Sample Generalization Theory for Machine Learning Practice
  Nageswara S. V. Rao (Oak Ridge National Lab, USA)
- Data Driven High Performance Data Access
  Krishna Kant (Temple University, USA)
- Compiler Optimizations for Heterogeneous Architectures
  Prithayan Barua (Georgia Inst. of Technology, USA)

04:30 - 05:00 pm : High Tea
Event II: 5:00 – 08:30 pm: “Road to CSA50” Celebrations

[Guest of Honor: Professor Anurag Kumar, IISc Director]

05:00 - 05:10 pm : Welcome Address
- Y. Narahari (Chair, Division of Electrical, Electronics and Computer Sciences)

05:10 - 05:30 pm : Quiz on CSA@IISc
- Host: Arpita Biswas (PhD Student)

05:30 - 06:00 pm : CSA Updates
- CSA: Current Status
  Shalabh Bhatnagar (Department Chair, CSA)
- CSA50 Plan
  Chiranjib Bhattacharyya (Professor, CSA)

06:00 - 07:00 pm : Panel Discussions: “CSA – Next 50 Years?”
- Moderator: Sajal Das (CSA Alumnus; Missouri Univ. of Science & Technology)
- Panelists
  o Bhavana Kanukurthi (Assistant Professor, CSA)
  o Swami Manohar (Former CSA Faculty; Senior Researcher, Microsoft Research)
  o Christos Papadimitriou (Donoval Family Professor, Columbia University)
  o Sriram Rajamani (Managing Director, Microsoft Research India Lab, Bangalore)
  o Rajeev Shorey (CSA Alumnus; Principal Scientist, TCS Innovation Labs)

07:00 – 07:15 pm: Dr. Sridhar Mitta (Former CTO, Wipro Information Technology Limited)
  The Birth of Wipro

07:15 - 07:30 pm : Director’s Address
- Anurag Kumar, Director, IISc

07:30 - 07:40 pm : Closing Remarks and Vote of Thanks
- Sajal Das (Missouri S&T)
  - Nageswara Rao (CSA Alumnus; Corporate Fellow, Oak Ridge National Lab)

07:40 - 08:30 pm : Dinner Get-together (CSA Lawn)