



## Department of Computer Science and Automation Indian Institute of Science, Bangalore

### “Road to CSA50” Symposium and Celebrations

Friday, January 4, 2019; MRC Auditorium, IISc Campus

The Department of Computer Science and Automation (CSA) came into existence as the School of Automation in 1969 and will be celebrating Golden Jubilee (50<sup>th</sup> 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*  
Srini 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 : Tea/Coffee Break**

## 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 Rajeesh Shorey (CSA Alumnus; Principal Scientist, TCS Innovation Labs)

### 07:00 - 07:15 pm : Director’s Address (Chair: S. Bhatnagar)

- Anurag Kumar, Director, IISc

### 07:15 - 07:30 pm : Closing Remarks and Vote of Thanks

- Sajal Das (Missouri S&T)
- Nageswara Rao (CSA Alumnus; Corporate Fellow, Oak Ridge National Lab)

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