

Academic and Professional Leadership

Saurabh Bagchi
Purdue University

I summarize here my leadership experience, in academic and in professional avenues. Overall, I have a track record in leadership roles and genuinely enjoy the challenges and the opportunities such roles afford.

1. Chair of Computer Engineering area (2018 - current)

The Computer Engineering area is a unit within the School of Electrical and Computer Engineering. It is responsible for the curriculum and the administration of the BS in Computer Engineering (BSCompE) degree. It has 37 primary faculty members and 12 more affiliate faculty members.

In my role as Chair of this area, I am responsible for setting the strategic goals, including faculty growth, and planning curricular changes, in collaboration with area faculty. I am also responsible for interacting with current and potential students in Computer Engineering, communicating the excitement and future potential of the area.

2. Director of NSF Center, CHORUS, from the CISE Directorate (2024-2029)

I lead the NSF Center called CHORUS, funded from its CISE Directorate. This involves 11 PIs, across 4 universities. I led the proposal writing and then the NSF visit at the final stage to finally win the Center. The Center project is titled "Resilient Distributed Cyber-Physical Systems through Rational and Dynamic Decision-Making Among Multiple Stakeholders". In my lead role, I am responsible for making cohesive progress as a team toward the Center goals, managing the relationship with our 4 key industrial partners, and hiring and managing 3 staff members specifically for the Center.

3. Director of Army Research Lab Institute, Assured Autonomy Innovation Institute (A2I2) (2020-current)

I lead this Institute, A2I2, which is funded by the US Army and involves 9 faculty across Purdue, University of Wisconsin at Madison, and Princeton University working on different aspects of security of distributed autonomous systems. I am responsible for leading the interactions between our faculty and the stakeholders; the latter involves both program officers and technical personnel in the Army. I have to manage the (rather complex) budget reporting on a quarterly granularity. Finally, I am responsible for transitioning some of our basic research into prototypes that the units within the Army, outside of ARL, can adopt.

4. Director of the Center for Resilient Infrastructures, Systems, and Processes (CRISP) (2018-current)

CRISP is funded by a consortium of companies and involves about 25 affiliated faculty members spanning most departments within the College of Engineering and Computer Science. It brings a diverse group of faculty, working on different aspects of resilience, centered around

resilience in cyber systems, cyber-physical systems, and socio-technical systems. I am responsible for making progress on projects that will be of value to our industry sponsors and making sure that a critical mass of corporate sponsors sign on each year. The administration of this Center can be challenging at times due to the diversity of academic units involved (across two Colleges and many departments within the College of Engineering).

5. Member of Board of Governors of IEEE Computer Society Society (2017-20; 2022-24)

I was elected to serve on the Board of Governors --- the Board has 15 members each of whom is elected by worldwide IEEE CS members. IEEE Computer Society is the largest professional organization in the field of Computer Science. Within the Board, I lead the Global Student Challenge Competition and hold the portfolio in the Membership and Geographic Activities Board. In this capacity, I am responsible for organization of events that engage our student and young professional members. In this role, I am also interfacing with worldwide corporations to have them support our events and to engage as judges. Most recently, I am organizing the North America Student Challenge (NASC) Competition, where students solve three real-world challenge problems. These problems are contributed by industry and academia and correspondingly, personnel from multiple companies and academic institutions will participate as judges.

6. Faculty Director Purdue ECE Corporate Partnerships Office (2021-current)

I am the Faculty Director of this office and oversee a staff of 5 that is responsible for managing our Corporate Partners, corporations that want to engage with ECE for student recruiting, research, and education needs. I manage a portfolio of about 40, companies, which include large household name companies in the computing and electrical engineering space as well as several highly innovative startups. I manage the group recruiting events as well as specialized recruiting events, enable interactions for research between the Corporate Partners and our faculty, and run the ECE Stories of Success class where leading lights and rising stars from these corporations share their professional stories with our students.