SHOURYA BOSE

Curriculum Vitae | January 2021



EDUCATION

PhD in Electrical Engineering

Baskin School of Engineering, University of California, Santa Cruz

September 2020 - Present

Santa Cruz, CA, USA

- Area of specialization is control of power systems and smart grids.
- My advisor is Dr. Yu Zhang.

M.Sc. (Hons.) in Mathematics BITS Pilani, KK Birla Goa Campus

August 2014 - December 2019

♀ Goa, India

B.E. (Hons.) in Electrical & Electronics Engineering BITS Pilani, KK Birla Goa Campus

August 2014 - December 2019

♀ Goa, India

EXPERIENCE

Research Associate

Indian Institute of Science, Bengaluru

• Continued work on NCS taken up during Research Internship.

Research Intern

Indian Institute of Science, Bengaluru

- Interned as a part of the Network & Control Systems Group in the Department of Electrical Engineering. Research focused on the topic of Networked Control Systems (NCS).
- Got published as first author in a conference and a journal paper.

Research Intern

Pixxel Space

Pengaluru, India

- Worked on spacecraft orbit simulation.
- Received experience of working on specialized Aerospace software such as AGI STK, NASA GMAT, etc.

Intern

HMT Tractors

May 2016 - July 2016

- Pinjore, Punjab
- Understood the supply chain of tractor manufacturing from raw material procurement to finished product.
- Presented an energy audit of the paint shop and gear assembly shop as a part of internship project.

SKILLSET

- I enjoy using mathematical analysis and sound first principles to solve challenging engineering problems.
- I also enjoy validating theoretical results by simulating them on software as well as physical testbeds.
- I am well versed with soft skills required to effectively make a point, and communicate efficiently with my colleagues to expedite jobs requiring teamwork.

COMPUTER SKILLS

- Programming Languages: C, C++, MATLAB, Python, LTEX, x86 Assembly, PSPICE, basic Verilog HDL.
- Software: Cadence Virtuoso, LABView, AutoCAD (2D and Isometric), AGI Graphics STK (Aerospace simulation software), Adobe Photoshop and Illustrator.
- Operating Systems: MS Windows, macOS, Linux (Ubuntu).

AWARDS

 Received Chancellor's Fellowship for the first year of my PhD studies at University of California Santa Cruz.

MISCELLANEOUS

- Hult Prize is an entrepreneurship competition. It is organized annually by the Hult Institute. The aim of Hult Prize is to encourage entrepreneurial solutions which can help in eliminating massive social issues like poverty. I was part of a four-member team that won Hult Prize 2015 Goa regional round held at BITS Goa, following which we presented our idea at the Hult Prize Global Eliminations held at Hotel Al-Jumeirah, Dubai.
- I enjoy college level Parliamentary Debating.
 I have, as a part of different teams from our college, attended more than eight intervarsity parliamentary debating tournaments.

PUBLICATIONS

- Bose. S, and Tallapragada. P. Event-Triggered Stabilization under Action-Dependent Markov Packet Drops. Accepted for publication in IET Control Theory and Applications.
- Bose. S, and Tallapragada. P. Event-Triggered Second Moment Stabilization under Markov Packet Drops. In Fifth Indian Control Conference (2019).
- Prakash. B, Setia. A, and Bose. S. Numerical solution for a system of fractional differential equations with applications in fluid dynamics and chemical engineering. In International Journal of Chemical Reactor Engineering, 15(5) (2017).