

EDUCATION

1. **Ph.D. Electrical and Computer Engineering** Sep 2020-
University of California Santa Cruz, California, USA
 - Recipient of Chancellor's Fellowship. Completed my master's coursework with a 3.96 GPA and now focusing on research.
 - I study the intersection of electric power systems, machine learning, optimization, and control theory.
2. **B.E. Electrical and Electronics Engineering & M.Sc. Mathematics** 2014-2019
BITS Pilani Goa Campus, Goa, India
 - Graduated with a dual degree, B.E. in EEE and an M.Sc in Mathematics.
 - Spent last year of studies at Department of Electrical Engineering, Indian Institute of Science (IISc) for thesis.

WORK EXPERIENCE

1. **Project Associate** Mar 2020 - Aug 2020
Indian Institute of Science, Bengaluru, India
 - Worked with the same group as the previous internship.
 - Theoretical research led to publication of first-author article in IET Control Theory and Applications.
2. **Research Intern** Jan 2019 - Feb 2020
Indian Institute of Science, Bengaluru, India
 - Worked as a part of the [Control & Network Systems Group](#).
 - On the theoretical side, I explored the problem of event-triggered control in linear systems with unreliable communications. On the applied side, I simulated a multi-scale search algorithm for a UAV with downward pointing sensor in MATLAB (original work: Dr. S. Carpin, UCM).
3. **Research Intern** Jan 2019 - Dec 2019
Pixxel, Bengaluru, India
 - Volunteered to do some orbital simulations to reckon number of satellites needed in constellation for parameters like coverage, revisit time, etc. Used AGI STK and NASA GMAT software, along with some post-processing on MATLAB.

PUBLICATIONS

1. "Co-optimization of Battery Routing and Load Restoration for Microgrids with Mobile Energy Storage Systems", **S. Bose** and Y. Zhang, *Accepted for IEEE PES-GM 2022*.
2. "Differentially Private Load Restoration for Microgrids with Distributed Energy Storage", **S. Bose** and Y. Zhang, *Accepted for IEEE ISGT 2022 NA*, [PDF](#).
3. "Load Restoration in Islanded Microgrids: Formulation and Solution Strategies", **S. Bose** and Y. Zhang, *Pre-publication*, [ArXiv Link](#).
 - Pre-publication manuscript received INFORMS Energy, Natural Resources and the Environment (ENRE) 2021 early-career best paper award.
4. "Event-Triggered Second-Moment Stabilisation under Action-Dependent Markov Packet Drops", **S. Bose** and P. Tallapragada, *IET Control Theory & Applications Vol. 15 No.7*, [Link](#).
5. "Event-Triggered Second Moment Stabilization under Markov Packet Drops", **S. Bose** and P. Tallapragada, *Fifth Indian Control Conference, 2019*, [Link](#).
6. "Numerical Solution for a System of Fractional Differential Equations with Applications in Fluid Dynamics and Chemical Engineering", B. Prakash, A. Setia and **S. Bose**, *International Journal of Chemical Reactor Engineering*, [Link](#).

SKILLS

- | | |
|---|---|
| 1. <i>Programming languages</i> | Python (pytorch), Matlab (and Simulink), C, x86 Assembly, L ^A T _E X |
| 2. <i>Power Systems software & packages</i> | OpenDSS, MATPOWER (Matlab) |
| 3. <i>Miscellaneous</i> | Adobe Photoshop, Powerpoint, L ^A T _E X |

*** UNOFFICIAL ***

Name: Bose, Shourya
Student ID: 1851189

Institution Info: University of California, Santa Cruz
1156 High Street
Santa Cruz, CA 95064

Degrees Awarded

Degree: Master of Science
Confer Date: 12/10/2021
Plan: MS in Electrical and Computer Engineering

Beginning of Graduate Record

2020 Fall Quarter

Program: Electrical & Computer Engineer
Plan: PhD in Electrical and Computer Engineering

Course	Description	Attempted	Earned	Grade	Points
AM 229	Convex Optimization	5.00	5.00	A+	20.000
ECE 240	LinearDynamicalSystem	5.00	5.00	A	20.000
ECE 253	Intro InformtnTheory	5.00	5.00	A	20.000
ECE 280Z	Smart Grids & Data	2.00	2.00	A+	8.000
GRAD 200	Academic Writing	0.00	0.00	S	0.000
GRAD 201	Oral Communication	0.00	0.00	S	0.000
GRAD 202	Reading & Research	0.00	0.00	S	0.000

Academic Standing Effective 12/23/2020: Good Standing

		Attempted	Earned	GPA Units	Points
Term GPA	0.00	Term Totals	17.00	17.00	68.000
Transfer Term GPA		Transfer Totals	0.00	0.00	0.000
Combined GPA	0.00	Comb Totals	17.00	17.00	68.000
Cum GPA	0.00	Cum Totals	17.00	17.00	68.000
Transfer Cum GPA		Transfer Totals	0.00	0.00	0.000
Combined Cum GPA	0.00	Comb Totals	17.00	17.00	68.000

2021 Winter Quarter

Program: Electrical & Computer Engineer
Plan: PhD in Electrical and Computer Engineering

Course	Description	Attempted	Earned	Grade	Points
AM 230	Numerical Optimiz	5.00	5.00	A	20.000
ECE 241	FeedbackContrlSystem	5.00	5.00	A	20.000
ECE 279	Opt/Control:PowerSys	5.00	5.00	A	20.000
ECE 280Z	Smart Grids & Data	2.00	2.00	A+	8.000

Academic Standing Effective 03/18/2021: Good Standing

		Attempted	Earned	GPA Units	Points
Term GPA	4.00	Term Totals	17.00	17.00	68.000
Transfer Term GPA		Transfer Totals	0.00	0.00	0.000
Combined GPA	4.00	Comb Totals	17.00	17.00	68.000
Cum GPA	4.00	Cum Totals	34.00	34.00	136.000
Transfer Cum GPA		Transfer Totals	0.00	0.00	0.000
Combined Cum GPA	4.00	Comb Totals	34.00	34.00	136.000

2021 Spring Quarter

Program: Electrical & Computer Engineer
Plan: PhD in Electrical and Computer Engineering

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Name: Bose, Shourya
Student ID: 1851189

Course	Description	Attempted	Earned	Grade	Points
AM 232	Optimal Control	5.00	5.00	A+	20.000
ECE 275	Energy Market	5.00	5.00	B+	16.500
ECE 291	Tomorrow's Professor	3.00	3.00	S	0.000
ECE 297A	Independent Study	5.00	5.00	A+	20.000

Academic Standing Effective 06/08/2021: Good Standing

			<u>Attempted</u>	<u>Earned</u>	<u>GPA Units</u>	<u>Points</u>
Term GPA	3.76	Term Totals	18.00	18.00	15.00	56.500
Transfer Term GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined GPA	3.76	Comb Totals	18.00	18.00	15.00	56.500
Cum GPA	3.92	Cum Totals	52.00	52.00	49.00	192.500
Transfer Cum GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined Cum GPA	3.92	Comb Totals	52.00	52.00	49.00	192.500

2021 Fall Quarter

Program: Electrical & Computer Engineer
Plan: PhD in Electrical and Computer Engineering

Program: Electrical & Computer Engineer
Plan: MS in Electrical and Computer Engineering

Course	Description	Attempted	Earned	Grade	Points
CSE 242	Machine Learning	5.00	5.00	A+	20.000
ECE 280Z	Smart Grids & Data	2.00	2.00	S	0.000
ECE 290	ECE Graduate Seminar	2.00	2.00	S	0.000
ECE 297A	Independent Study	5.00	5.00	A+	20.000

Academic Standing Effective 12/08/2021: Good Standing

			<u>Attempted</u>	<u>Earned</u>	<u>GPA Units</u>	<u>Points</u>
Term GPA	4.00	Term Totals	14.00	14.00	10.00	40.000
Transfer Term GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined GPA	4.00	Comb Totals	14.00	14.00	10.00	40.000
Cum GPA	3.94	Cum Totals	66.00	66.00	59.00	232.500
Transfer Cum GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined Cum GPA	3.94	Comb Totals	66.00	66.00	59.00	232.500

2022 Winter Quarter

Program: Electrical & Computer Engineer
Plan: PhD in Electrical and Computer Engineering

Course	Description	Attempted	Earned	Grade	Points
CSE 201	Analysis Algorithms	5.00	5.00	A	20.000
ECE 280Z	Smart Grids & Data	2.00	2.00	A+	8.000
ECE 297B	Independent Study	10.00	10.00	A+	40.000

Academic Standing Effective 03/16/2022: Good Standing

			<u>Attempted</u>	<u>Earned</u>	<u>GPA Units</u>	<u>Points</u>
Term GPA	4.00	Term Totals	17.00	17.00	17.00	68.000
Transfer Term GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined GPA	4.00	Comb Totals	17.00	17.00	17.00	68.000
Cum GPA	3.95	Cum Totals	83.00	83.00	76.00	300.500
Transfer Cum GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined Cum GPA	3.95	Comb Totals	83.00	83.00	76.00	300.500

*** U N O F F I C I A L ***

Name: Bose, Shourya
Student ID: 1851189

2022 Spring Quarter

Program: Electrical & Computer Engineer
Plan: PhD in Electrical and Computer Engineering

Course	Description	Attempted	Earned	Grade	Points
AM 231	Nonlinear Control	5.00	5.00	A+	20.000
ECE 297B	Independent Study	10.00	10.00	A+	40.000

Academic Standing Effective 06/10/2022: Good Standing

		Attempted	Earned	GPA Units	Points
Term GPA	4.00	Term Totals	15.00	15.00	60.000
Transfer Term GPA		Transfer Totals	0.00	0.00	0.000
Combined GPA	4.00	Comb Totals	15.00	15.00	60.000
Cum GPA	3.96	Cum Totals	98.00	98.00	360.500
Transfer Cum GPA		Transfer Totals	0.00	0.00	0.000
Combined Cum GPA	3.96	Comb Totals	98.00	98.00	360.500

2022 Fall Quarter

Program: Electrical & Computer Engineer
Plan: PhD in Electrical and Computer Engineering

Course	Description	Attempted	Earned	Grade	Points
ECE 280Z	Smart Grids & Data	2.00	0.00		0.000
ECE 299A	Thesis Research	5.00	0.00		0.000

		Attempted	Earned	GPA Units	Points
Term GPA	0.00	Term Totals	7.00	0.00	0.000
Transfer Term GPA		Transfer Totals	0.00	0.00	0.000
Combined GPA	0.00	Comb Totals	7.00	0.00	0.000
Cum GPA	3.96	Cum Totals	105.00	98.00	360.500
Transfer Cum GPA		Transfer Totals	0.00	0.00	0.000
Combined Cum GPA	3.96	Comb Totals	105.00	98.00	360.500

Graduate Career Totals

Cum GPA:	3.96	Cum Totals	105.00	98.00	360.500
Transfer Cum GPA		Transfer Totals	0.00	0.00	0.000
Combined Cum GPA	3.96	Comb Totals	105.00	98.00	360.500

Non-Course Milestones

Graduate Candidacy

Status: Completed
Program: Electrical & Computer Engineer

End of *** U N O F F I C I A L ***