Shourya Bose
Phone - (+1) 831-239-7205
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Github - Link, Google Scholar - Link, LinkedIn - Link

ABOUT ME

I am a sixth-year Ph.D. candidate with the ECE Department at UC Santa Cruz. My research covers **federated learning**, **foundation models**, **convex optimization**, and **reinforcement learning** applied for tasks in electric power systems. I also have experience with **fine-tuning** of **large language models (LLMs)**. Having a strong mathematical background, I excel at creating mathematical AI/ML (and other) models and converting them into efficient code.

ACADEMICS AND SKILLS

1. ***Programming languages***   Python (with PyTorch, JAX), C, Matlab (and Simulink), SQL, LaTeX
2. ***Graduate Courses***   Machine (Deep) Learning, Numerical & Convex Optimization, Control Theory & Optimal Control, Analysis of Algorithms, Optimization & Economics of Power Systems
3. ***Undergraduate Courses***   Various abstract math & numerical computation courses, Various control, power electronics & systems courses, Electrodynamics
4. ***Teaching***   TA for CSE20 (Python programming), ECE30 (Engineering principles of electronics), ECE13 (Computer Systems and C Programming), Mentor for SIP 2021 & 2022

EDUCATION

1. **Ph.D. Electrical and Computer Engineering**   <u>**Sep 2020 - March 2026 (expected)**</u>

   University of California Santa Cruz, California, USA
   - Part of Energy, Optimization & Data Analytics Lab with PI Dr. Yu Zhang.
   - Recipient of Chancellor's and Dissertation-year Fellowship. Completed my master's coursework with a 3.96 GPA and now focusing on research.
   - Studying the intersection of machine learning, optimization, and control theory for applications in electric power systems.

2. **B.E. Electrical and Electronics Engineering & M.Sc. Mathematics**   <u>**2014-2019**</u>

   BITS Pilani Goa Campus, Goa, India
   - Graduated with a dual degree, B.E. in Electrical and Electronics Engineering 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. **Research Aide Technical, Ph.D.**   <u>**Jun 2024 - Dec 2024**</u>

   Argonne National Laboratory, Illinois, USA
   - Researching <u>foundation models for time-series forecasting</u>, and <u>federated finetuning</u> thereof with Dr. Kibaek Kim.
   - Worked on finetuning base models and foundation models on 40+ Nvidia A100 GPUs. Results published in NeurIPS Workshop "Time Series in the Age of Large Models".
   - Working further on implementing federated model finetuning with APPFL.

2. **Givens Associate**   <u>**Jun 2023 - Sep 2023**</u>

   Argonne National Laboratory, Illinois, USA
   - Researching <u>privacy-preserving federated learning</u> of load forecasting data with Dr. Kibaek Kim.
   - Working with PyTorch APPFL package.
   - Working remotely as visiting student after end of on-site duration in September.

3. **Project Associate**   <u>**Mar 2020 - Aug 2020**</u>

   Indian Institute of Science, Bengaluru, India
   - Worked on <u>event-triggered control</u> with the same group as the previous internship.
   - Theoretical research led to publication of first-author article in IET Control Theory and Applications.

4. **Research Intern**   <u>**Jan 2019 - Feb 2020**</u>

   Indian Institute of Science, Bengaluru, India
   - Worked as a part of the Control & Network Systems Group.
   - Researched <u>multi-scale search algorithms</u> for a UAV with downward pointing sensor with implementation in MATLAB.

5. **Research Intern**   <u>**Jan 2019 - Dec 2019**</u>

   Pixxel, Bengaluru, India
   - Volunteered to do <u>orbital simulations</u> to calculate number of satellites needed in constellation for target parameters like coverage, revisit time, etc.
   - Used AGI STK and NASA GMAT software, along with some post-processing in MATLAB.

FIRST-AUTHOR PUBLICATIONS - JOURNALS

1. "A Mixture-of-Gradient-Experts Framework for Accelerating AC Optimal Power Flow", **S. Bose**, K. Chen, Y. Zhang, Under Review at a double-blind journal.
2. "Load Restoration in Islanded Microgrids: Formulation and Solution Strategies", **S. Bose** and Y. Zhang, *IEEE Transactions on Control of Network Systems*, 2023, Link.
     - **Award:** INFORMS Energy, Natural Resources and the Environment (ENRE) 2021 early-career best paper award.
3. "Event-Triggered Second-Moment Stabilisation under Action-Dependent Markov Packet Drops", **S. Bose** and P. Tallapragada, *IET Control Theory & Applications*, 2019, Link.

FIRST-AUTHOR PUBLICATIONS - CONFERENCES

1. "From RNNs to Foundation Models: An Empirical Study on Commercial Building Energy Consumption", **S. Bose**, Y. Li, Y. Zhang, and K. Kim, *NeurIPS Workshop on Time Series in the Age of Large Models, 2024*, Link.
2. "Addressing Heterogeneity in Federated Load Forecasting with Personalization Layers", **S. Bose** and K. Kim, 2023, *IISE Conference and Expo, 2024*, arXiv Link.
3. "Privacy-Preserving Load Forecasting for Personalized Model Obfuscation", **S. Bose**, Y. Zhang and K. Kim, *IEEE PES-GM 2024*, Link.
4. "On LinDistFlow Model Congestion Pricing: Bounding the Changes in Power Tariffs", **S. Bose**, K. Chen and Y. Zhang, *IEEE ISGT 2023*, Link.
     - **Award:** IEEE Student and Young Professional (SYPA) Travel Grant, UCSC Dean's Travel Grant
5. "Co-optimization of Battery Routing and Load Restoration for Microgrids with Mobile Energy Storage Systems", **S. Bose** and Y. Zhang, *IEEE PES-GM 2022*, Link.
6. "Differentially Private Load Restoration for Microgrids with Distributed Energy Storage", **S. Bose** and Y. Zhang, *IEEE ISGT 2022 NA*, Link.
7. "Event-Triggered Second Moment Stabilization under Markov Packet Drops", **S. Bose** and P. Tallapragada, *Fifth Indian Control Conference, 2019*, Link.

OTHER PUBLICATIONS AND REPORTS

1. "Federated Short-Term Load Forecasting with Personalization Layers for Heterogeneous Clients", **S. Bose** and K. Kim, arXiv Link.
2. "Unsupervised Deep Learning for AC Optimal Power Flow via Lagrangian Duality", K. Chen, **S. Bose** and Y. Zhang, *IEEE GLOBECOM 2022*, Link.
3. "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*, 2017, Link.

AWARDS AND HONORS

These are excluding the awards for specific conferences or papers.

1. **Dissertation Year Fellowship, UCSC:** Highly competitive scholarship to cover funding for final year of Ph.D.
2. **Learning to Run a Power Network (L2RPN, 2023) by TU Delft:** Competition to use RL and RL-adjacent techniques to ensure reliable operation of power grids. Our team (myself, Q. Yang, Y. Zhang) placed **first** among 30+ teams and won 1500 euros.
3. **Chancellor's Fellowship, UCSC:** Highly competitive scholarship to financially cover first year of PhD studies.
4. **Hult Prize Regionals, 2016:** Social entrepreneurship competition organized by Hult Institute. Our team placed first.

UNIVERSITY OF CALIFORNIA
SANTA CRUZ

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

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	17.00	68.000
Transfer Term GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined GPA	0.00	Comb Totals	17.00	17.00	17.00	68.000
Cum GPA	0.00	Cum Totals	17.00	17.00	17.00	68.000
Transfer Cum GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined Cum GPA	0.00	Comb Totals	17.00	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	FeedbackContrlSystm	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	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	4.00	Cum Totals	34.00	34.00	34.00	136.000
Transfer Cum GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined Cum GPA	4.00	Comb Totals	34.00	34.00	34.00	136.000

2021 Spring Quarter

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

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

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'sProfessor	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

			Attempted	Earned	GPA Units	Points
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

			Attempted	Earned	GPA Units	Points
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

			Attempted	Earned	GPA Units	Points
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	15.00	60.000
Transfer Term GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined GPA	4.00	Comb Totals	15.00	15.00	15.00	60.000
Cum GPA	3.96	Cum Totals	98.00	98.00	91.00	360.500
Transfer Cum GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined Cum GPA	3.96	Comb Totals	98.00	98.00	91.00	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	2.00	S	0.000
ECE	299A	Thesis Research	5.00	5.00	A+	20.000

Academic Standing Effective 01/03/2023: Good Standing

			Attempted	Earned	GPA Units	Points
Term GPA	4.00	Term Totals	7.00	7.00	5.00	20.000
Transfer Term GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined GPA	4.00	Comb Totals	7.00	7.00	5.00	20.000
Cum GPA	3.96	Cum Totals	105.00	105.00	96.00	380.500
Transfer Cum GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined Cum GPA	3.96	Comb Totals	105.00	105.00	96.00	380.500

2023 Winter Quarter

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

Course		Description	Attempted	Earned	Grade	Points
ECE	299A	Thesis Research	5.00	5.00	S	0.000

Academic Standing Effective 06/22/2023: Good Standing

			Attempted	Earned	GPA Units	Points
Term GPA	0.00	Term Totals	5.00	5.00	0.00	0.000
Transfer Term GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined GPA	0.00	Comb Totals	5.00	5.00	0.00	0.000
Cum GPA	3.96	Cum Totals	110.00	110.00	96.00	380.500
Transfer Cum GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined Cum GPA	3.96	Comb Totals	110.00	110.00	96.00	380.500

2023 Spring 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	2.00	S	0.000
ECE	299A	Thesis Research	5.00	5.00	A+	20.000

UNIVERSITY OF CALIFORNIA SANTA CRUZ

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

Name: **Bose, Shourya**
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Academic Standing Effective 06/16/2023: Good Standing

			Attempted	Earned	GPA Units	Points
Term GPA	4.00	Term Totals	7.00	7.00	5.00	20.000
Transfer Term GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined GPA	4.00	Comb Totals	7.00	7.00	5.00	20.000
Cum GPA	3.96	Cum Totals	117.00	117.00	101.00	400.500
Transfer Cum GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined Cum GPA	3.96	Comb Totals	117.00	117.00	101.00	400.500

2023 Summer Quarter

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

Course		Description	Attempted	Earned	Grade	Points
ECE	297F	Independent Study	2.00	2.00	S	0.000

Academic Standing Effective 09/05/2023: Good Standing

			Attempted	Earned	GPA Units	Points
Term GPA	0.00	Term Totals	2.00	2.00	0.00	0.000
Transfer Term GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined GPA	0.00	Comb Totals	2.00	2.00	0.00	0.000
Cum GPA	3.96	Cum Totals	119.00	119.00	101.00	400.500
Transfer Cum GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined Cum GPA	3.96	Comb Totals	119.00	119.00	101.00	400.500

2023 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	2.00	A+	8.000
ECE	299A	Thesis Research	5.00	5.00	S	0.000

Academic Standing Effective 12/16/2023: Good Standing

			Attempted	Earned	GPA Units	Points
Term GPA	4.00	Term Totals	7.00	7.00	2.00	8.000
Transfer Term GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined GPA	4.00	Comb Totals	7.00	7.00	2.00	8.000
Cum GPA	3.96	Cum Totals	126.00	126.00	103.00	408.500
Transfer Cum GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined Cum GPA	3.96	Comb Totals	126.00	126.00	103.00	408.500

2024 Winter 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	2.00	S	0.000
ECE	299A	Thesis Research	5.00	5.00	A+	20.000

Academic Standing Effective 03/25/2024: Good Standing

			Attempted	Earned	GPA Units	Points
Term GPA	4.00	Term Totals	7.00	7.00	5.00	20.000
Transfer Term GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined GPA	4.00	Comb Totals	7.00	7.00	5.00	20.000

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

Name: **Bose, Shourya**
Student ID: **1851189**

Cum GPA	3.96	Cum Totals	133.00	133.00	108.00	428.500
Transfer Cum GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined Cum GPA	3.96	Comb Totals	133.00	133.00	108.00	428.500

2024 Spring 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	2.00	S	0.000
ECE	299A	Thesis Research	5.00	5.00	S	0.000

Academic Standing Effective 06/11/2024: Good Standing

			Attempted	Earned	GPA Units	Points
Term GPA	0.00	Term Totals	7.00	7.00	0.00	0.000
Transfer Term GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined GPA	0.00	Comb Totals	7.00	7.00	0.00	0.000
Cum GPA	3.96	Cum Totals	140.00	140.00	108.00	428.500
Transfer Cum GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined Cum GPA	3.96	Comb Totals	140.00	140.00	108.00	428.500

2024 Summer Quarter

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

Course		Description	Attempted	Earned	Grade	Points
ECE	297F	Independent Study	2.00	2.00	S	0.000

Academic Standing Effective 10/01/2024: Good Standing

			Attempted	Earned	GPA Units	Points
Term GPA	0.00	Term Totals	2.00	2.00	0.00	0.000
Transfer Term GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined GPA	0.00	Comb Totals	2.00	2.00	0.00	0.000
Cum GPA	3.96	Cum Totals	142.00	142.00	108.00	428.500
Transfer Cum GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined Cum GPA	3.96	Comb Totals	142.00	142.00	108.00	428.500

2024 Fall Quarter

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

Course		Description	Attempted	Earned	Grade	Points
ECE	299A	Thesis Research	5.00	5.00	S	0.000

Academic Standing Effective 12/17/2024: Good Standing

			Attempted	Earned	GPA Units	Points
Term GPA	0.00	Term Totals	5.00	5.00	0.00	0.000
Transfer Term GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined GPA	0.00	Comb Totals	5.00	5.00	0.00	0.000
Cum GPA	3.96	Cum Totals	147.00	147.00	108.00	428.500
Transfer Cum GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined Cum GPA	3.96	Comb Totals	147.00	147.00	108.00	428.500

2025 Winter Quarter

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

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

Name: **Bose, Shourya**
Student ID: **1851189**

Course		Description	Attempted	Earned	Grade	Points
ECE	299A	Thesis Research	5.00	5.00	S	0.000

Academic Standing Effective 03/21/2025: Good Standing

			Attempted	Earned	GPA Units	Points
Term GPA	0.00	Term Totals	5.00	5.00	0.00	0.000
Transfer Term GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined GPA	0.00	Comb Totals	5.00	5.00	0.00	0.000
Cum GPA	3.96	Cum Totals	152.00	152.00	108.00	428.500
Transfer Cum GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined Cum GPA	3.96	Comb Totals	152.00	152.00	108.00	428.500

2025 Spring 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	2.00	S	0.000
ECE	299A	Thesis Research	5.00	5.00	S	0.000

Academic Standing Effective 06/10/2025: Good Standing

			Attempted	Earned	GPA Units	Points
Term GPA	0.00	Term Totals	7.00	7.00	0.00	0.000
Transfer Term GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined GPA	0.00	Comb Totals	7.00	7.00	0.00	0.000
Cum GPA	3.96	Cum Totals	159.00	159.00	108.00	428.500
Transfer Cum GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined Cum GPA	3.96	Comb Totals	159.00	159.00	108.00	428.500

2025 Fall Quarter

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

Course		Description	Attempted	Earned	Grade	Points
CSE	216	Formal Methods	5.00	0.00		0.000
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	12.00	0.00	0.00	0.000
Transfer Term GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined GPA	0.00	Comb Totals	12.00	0.00	0.00	0.000
Cum GPA	3.96	Cum Totals	171.00	159.00	108.00	428.500
Transfer Cum GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined Cum GPA	3.96	Comb Totals	171.00	159.00	108.00	428.500

Graduate Career Totals

Cum GPA:	3.96	Cum Totals	171.00	159.00	108.00	428.500
Transfer Cum GPA		Transfer Totals	0.00	0.00	0.00	0.000
Combined Cum GPA	3.96	Comb Totals	171.00	159.00	108.00	428.500

Non-Course Milestones
Graduate Candidacy
Status: Completed
Program: Electrical & Computer Engineer

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