

EDUCATION

The University of Texas at Austin, Master of Science, Electrical and Computer Engineering (GPA: 3.8/4) **May 2024**
IIT Kharagpur, Bachelor of Technology (Honors), Electrical Engineering, Minor in CS (GPA: 8.8/10) **July 2020**

INDUSTRY EXPERIENCE

Tesla **Feb 2026 — Present**
Systems Integration Engineer: Energy Products Palo Alto, California

- Firmware integration/validation of energy storage systems: Powerwall 3 with solar PV array
- Tech Stack: Agentic AI, Python, C/C++, Git, Jenkins CI/CD, CAN signal analysis, Hardware bringup

Texas Instruments **June 2024 — Feb 2026**
Hardware Systems Engineer: Battery Charging Products Dallas, Texas

- Product ownership from specification to bring up/datasheet release: including Lab validation and EVM debug
- Major product releases (volume > 2Mu/year): [BQ25640](#), [BQ25630](#), [BQ24138](#), [BQ25171-Q1](#), [BQ25190](#)

Jaguar Land Rover **Sept 2020 — August 2022**
Power Electronics Engineer Coventry, United Kingdom

- Filed an invention disclosure related to charge-sharing hardware for the company's next-gen EVs
- Simulated 11kW and 22kW (240V AC to 600V DC to 400/800V DC) on-board charger circuits to improve Power Quality
- Investigated device/component selection, controller design, efficiency optimization, and μ controller programming

Webber Electrocorp **Sept 2019 — Mar 2020**
Founding Chief Power Electronics Engineer IIT Kharagpur, India

- Built prototypes and helped launch the most well-funded campus startup in Sept. 2019 [See: [Launch Story](#)]

ACADEMIC/RESEARCH EXPERIENCE: [Google Scholar](#)

UT Austin Power Electronics Lab: Graduate Teaching Assistant **Sept 2023 — May 2024**
Advisor: Dr. Brian Johnson Austin, Texas

- Managed and re-designed the Power Electronics Lab (ECE462L & ECE394J) for 40 senior/graduate students

UT Austin CML: Graduate Research Assistant **Nov 2022 — May 2023**
Advisors: Dr. Dhiraj Murthy, Dr. Anna Wilkinson Austin, Texas

- Investigated social media data using multi-modal Machine Learning techniques for public health research and also supervised undergraduates as part of the [Computational Media Lab](#)

IIT Kharagpur Bachelors Dissertation: "Charger Design for light Electric Vehicles" **July 2019 — Mar 2020**
Advisor: Dr. Dipankar Debnath [keshariS/charger4LightEVs](#)

- Designed an efficient AC charger for light electric vehicles using interleaved boost PFC followed by PSFB topology.
- Designed auxiliary power supplies using the flyback and buck converters, fabricated and tested the hardware.

IIT Kharagpur EV Research Group Lead **Oct 2017 — Mar 2020**
Advisor: Dr. Vikranth Racherla IIT Kharagpur, India

- Designed modular power and driver boards for implementing 400W and 1kW BLDC motor controllers
- IIT Kanpur startup - Skytex**: Collaborated on an Unmanned Aerial Vehicle project
- MOOC Specializations: [Power Electronics](#) (University of Colorado Boulder) || [Electric Cars](#) (TU Delft)

AWARDS & HONORS

2024 **Texas Public Educational Grant scholarship** (awarded by UT Austin)
2023 **Professional Development Award** (awarded by UT Austin ECE for conference presentation)
2020 **Systems Society Award** (Best B. Tech Thesis among Electrical, Energy and Instrumentation Engineering depts.)
2019 **Silver Trophy** ([Inter IIT Tech Meet 8.0](#), IIT Roorkee: Tech competition among 20 major IITs)
2016 **KVPY National Fellow** (funded by the Department of Science and Technology, Government of India)

LEADERSHIP & COMMUNITY OUTREACH

Leadershape: Discussed critical social and global issues, embracing a healthy disregard for the impossible **May 2023**