Location: Palo Alto, California

Posting title: Electronics Design Intern

*Disclaimer: This position is expected to start around Sept 2022 and continue through the entire Fall term (i.e. through Dec) or into early Winter 2023 if available. We ask for a minimum of 12 weeks, **full-time**, for most internships. Please consider before submitting an application.*

Internship Program at Tesla

The Internship Recruiting Team is driven by the passion to recognize emerging talent. Our year-round program places the best students in positions where they will grow both technically and personally through their experience working closely with their manager, mentor, and team. We are dedicated to providing an experience that allows for the intern to experience life at Tesla by giving them projects that are critical to their team's success.

Instead of going on coffee runs and making copies, you'll be seated at the table making critical decisions that will influence not only your team, but the overall achievement of Tesla's mission.

About the team

The Industrial Energy team designs the eyes, ears, and brains of Tesla's Energy Storage (Megapack) and Supercharging products. The system control boards manage the central processing, communications, high voltage safety, thermal systems, and system level components including breakers, contactors, and pyrofuses.

Responsibilities

- Design and development of digital and analog electronics for control of high-power electronic systems.
- Working with senior engineers, create schematics, and PCB layouts.
- Electrical design analysis including circuit simulation, EMC, thermals, design for manufacturing, and design for test.
- Develop and execute test plans to validate circuit performance.
- Use basic lab equipment including oscilloscopes, power supplies, electronic loads, and tools to construct and modify circuits during design debug.
- Collaborate with other electrical, systems, mechanical, firmware, and test engineers to meet design and program needs.

Requirements

- Experience using Altium, LTspice, Matlab, Python.
- Hands-on experience designing, building, and testing PCBAs.
- Experience working with switching power supplies and LDOs, analog sense circuits, MCU and digital circuits, communications (CAN, Ethernet, I2C, SPI, RS485), and high voltage circuits.
- Prior experience with taking leading roles in school or university extracurricular design projects /competitions is a plus.