

Bimotal Electrical Engineering Intern Job Description Summer 2024

Bimotal Application Submission

The Company

Bimotal was founded in 2019 to develop innovative micro-electric powertrains for right-sized personal vehicles. We are a group of Tesla, startup, and bike industry alumni working towards our mission of reducing barriers to car-free mobility. In addition to our direct-to-consumer product, Elevate, an easily retrofittable and removable powertrain that converts disc-brake bicycles into e-bikes, we have also partnered with vehicle OEMs (bikes and other micromobility vehicles) to provide them with high-performance powertrains specifically designed for their needs. Bimotal is positioning itself as a technology company with the aim of making the best microelectric powertrains in the world, and eventually, the best personal-sized electric vehicles. Come join us in building the future of transportation.

The Job

This is a paid position. As an Electrical Engineer Intern at Bimotal you'll help design, build, and test our custom circuit boards. You'll work with experienced engineers to bring boards from concept to production. You'll get to ride bikes and experience our products while troubleshooting electrical issues. Interns at Bimotal get lots of responsibility and a chance to learn, have fun, and help us build great products.

Responsibilities

- Be responsible for various parts of circuit board design including:
 - o Requirements gathering
 - Trade offs, rough cost/ size/ power estimates
 - Research on relevant technologies
 - Block diagrams
 - Simulation
 - Schematics
 - Working with mechanical and firmware engineers
 - o PCB layout
 - Testing
- Troubleshoot electrical issues with our products on bikes
- Develop test methods and hardware for circuit boards and wire harnesses

Qualifications

- Experience with circuit board design (able to show project examples)
- Proficient with schematics and PCB layout in Altium designer



- Experience using test equipment (scope, power supply, etc) and troubleshooting circuit boards and wire harnesses
- Good understanding of microcontrollers, power converters (LDO and DC-DC), communication buses, motor controllers, and interfacing with sensors
- Excellent reading, writing, and spoken communication skills
- Passionate about technology and excited to learn new things

Logistics

Please fill out a <u>Bimotal Application Submission</u> to apply for this position. Our office is in a beautiful location and is walking distance to many great lunch spots (2 blocks to our favorite burrito spot, Picante), Amtrak, and BART.