



# Bimotal Senior Mechanical Design Engineer Job Description

[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

As a Senior Mechanical Design Engineer at Bimotal, you will be responsible for the full product lifecycle for numerous components and assemblies including: hand calcs, design and analysis, FEA, prototype, test, optimize, DFM, and production ramp. Our shop is continually expanding, and most of our prototyping and testing are already being done in house--everything we do revolves around increasing our speed of engineering iterations. We are a lean team, moving rapidly, while maintaining a high level of quality that we developed from our past experiences at larger companies. If you are excited to take ownership of projects with real stakes, work independently, and tackle unfamiliar and challenging problems to build world-class electric powertrains we would love to hear from you.

## Responsibilities

- Full-stack mechanical engineering development, design and execution
- Design of hardware, hardware testing fixtures, production tools and fixtures
- Spreadsheet calculations, architecture, CAD design, FEA, rapid prototyping and optimization with quick design iterations, PLM/PDM life cycle management, NPI line management and prototype assembly, manufacturing support, supplier management
- Design for manufacturing, test, reliability, and service

## Qualifications

- Expert at CAD packages, strong physics background with extensive mechanical engineering expertise and a passion for details and deep work.
- Experience taking products from concept to high-volume production
- Excellent reading, writing, and spoken communication skills
- Extremely motivated and excited by taking major responsibility at an early startup
- Creation and operation of test equipment



- Preferred - experience with the design and simulation of gearbox components and assemblies
- Preferred - strong with CFD, thermal, and mechanical simulation
- Preferred - electrical knowledge and understanding, ability to read schematics, ability to understand circuit board layout traces and PCBA design and understand how those translate into the mechanical world

### **Logistics**

Please fill out a [Bimotal Application Submission](#) to apply for this position. Bimotal includes a health insurance stipend, allows for 1 remote work day per week (4 days in person at our Berkeley office), and has flexible PTO as well as regular holidays. 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. All employees receive significant equity packages--we want you to have significant ownership in the work that you will be doing here.