

Bimotal Staff Mechanical Design Engineer JD

[Bimotal Application Submission](#)

The Company

Bimotal was founded in 2019 to develop innovative micro-electric powertrains for right-sized personal vehicles. We are a team of Tesla, startup, and bike industry alumni working toward a shared mission: reducing barriers to car-free mobility.

In addition to our direct-to-consumer product, Elevate—a retrofittable, removable powertrain that converts disc-brake bicycles into e-bikes—we partner with vehicle OEMs (bicycles and other micromobility platforms) to deliver high-performance powertrains tailored to their needs.

Bimotal is positioning itself as a technology company focused on building the best micro-electric 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 Staff Mechanical Design Engineer at Bimotal, you will own full system architecture and the entire product lifecycle for advanced electric powertrains. Your responsibilities will span from hand calculations and concept design through FEA, prototyping, testing, optimization, DFM, production ramp, and long-term reliability improvements—including field issue resolution and service reduction strategies.

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

- Own system-level architecture and design of complete electric powertrains
- Lead full-stack mechanical engineering from concept through production
- Teach newer mechanical engineers proper processes, CAD practices, PLM practices, and more; level up the engineering caliber of the company
- Design hardware, hardware testing fixtures, production tools and fixtures, product scopes, specifications, and more
- Perform spreadsheet calculations, system architecture, CAD design, FEA, rapid prototyping and optimization with quick design iterations, PLM/PDM lifecycle management, NPI line management and prototype assembly, manufacturing support, and supplier management
- Design for manufacturing, test, reliability, and service
- Contribute to longer-term company objectives, such as increasing iteration speed for complete powertrain development

Qualifications

- Strong physics background with 8+ years of extensive mechanical engineering expertise and a passion for detail and deep work
- Deep expert with multiple CAD packages; able to create robust parametric models with ease
- Proven experience owning complex mechanical systems (100+ parts), taking designs from early architecture sketches to detailed CAD and drawings ready for high-volume processes such as die casting and injection molding
- Master of GD&T and dimensional tolerancing
- Experience working closely with suppliers to meet quality, cost, and lead time targets
- Experience with electric powertrains; electric motor and gearbox expertise strongly preferred
- Experience taking multiple products from concept to high-volume production
- Skilled in root cause analysis, test process development, and solving long-tail reliability issues
- Proficient in multi-dimensional tolerance stackups
- Adept with CFD, thermal, and mechanical simulation
- Excellent reading, writing, and verbal communication skills
- Extremely motivated and excited to take on major responsibility at an early-stage startup
- Basic electrical knowledge and understanding; able to read schematics and interpret circuit board layouts and PCBA designs for mechanical integration

Logistics

To apply, please submit a [Bimotal Application Submission](#) to apply for this position.

Bimotal offers a health insurance stipend, flexible PTO, and observes standard holidays. We support one remote work day per week (4 days in-person at our Berkeley office). Our office is located in a beautiful area, within walking distance of great food (2 blocks from our favorite burrito spot, Picante), Amtrak, and BART.

All employees receive significant equity—we want you to have meaningful ownership in the work you'll help bring to life.