

Senior Mechanical/Electrical Engineer at Biomedical Diagnostics Startup

We are a Boston-area biomedical diagnostics startup company seeking a highly skilled mechanical/electrical engineer to join our team. The ideal candidate will have a mix of mechanical and electrical engineering skills.

Your mission will be to lead and work with teams design, prototype, & build low-cost, high-performance clinical diagnostics to improve patient outcomes against some of the most common causes of death on the planet.

Required Qualifications

- Bachelor's or Master's degree in Electrical Engineering, Mechanical Engineering, Biomedical Engineering, or related field
- Proven track record of successful leadership in product development, testing, and implementation
- Proficiency in CAD software and hardware design tools
- Strong understanding of mechanical/electrical engineering principles and best practices
- Experience identifying key performance measures, defining those measures, reporting units and error, and comfort/facility with statistical distributions, their properties, and consequences
- Experience with circuit design, PCB layout, and electronic components
- Knowledge of signal processing and instrumentation
- Experience with rapid prototyping techniques and iterative design processes
- Strong record-keeping and written and oral communication skills
- Exceptional analytical, problem-solving, and communications skills with meticulous attention to detail
- Experience converting new/unknown asks into specific tasks, deliverables, and timelines and successfully executing on the resulting plan
- Professionalism, a sense of mission, and a desire to work with others who feel the same in a fast-paced, collaborative research environment

Preferred Qualifications

- Familiarity with medical device quality systems (21CFR820, ISO13485), design development planning, requirements management, risk management (ISO14971) and efficient doc control workflows
- Familiarity with Design for Manufacturing (DFM), mechanical drawings, DHF/DMR, design transfer
- Experience designing, executing or overseeing engineering tests and design verification
- 3-5 years of experience in hardware design, preferably in medical/precision instruments
- Experience with firmware development for embedded systems
- Proficiency in programming languages commonly used in instrument control and data acquisition (e.g., Python, C++, LabVIEW)

- Knowledge of thermal management techniques for sensitive components
- Experience with electromagnetic compatibility (EMC) testing for medical devices
- Experience with version control (e.g., Git) for both hardware designs and software
- Familiarity with optical sensing techniques relevant to in-vitro diagnostics (e.g., light, fluorescence, spectroscopy, microscopy, interferometry)
- Experience with failure mode and effect analysis (FMEA) and electrical troubleshooting

Particulars

- Company headquarters: Beverly, MA; on-site work required
- Competitive salary and equity compensation package
- Comprehensive health benefits and flexible paid time off

Why Join Us?

With the above qualifications, you could work anywhere. But ask yourself: do you want to be just a cog in someone else's machine? Punching a clock for a paycheck? Working on something sad, boring, or meaningless? Or do you want to be a mission-critical part of building things to save lives? If the answer to that last question is "yes," please send a short (~250-word) cover letter and resume/CV, including any links to your GitHub or other relevant work, to careers@astradx.com.

Note: Your cover letter should:

- Explain what it is about us, and/or about your background, that makes you interested in us specifically (~100 words)
- Mention one concept, idea, invention, or discovery that you've come across in the past year or so that you've found **really cool**, and describe **why** (~100 words). It can be related to this area, your own work, or something else