

# Senior Hardware Engineer (job reference #060120-01)

### ABOUT THE COMPANY

BioCircuit Technologies is an Atlanta-based company developing novel medical devices to diagnose and treat neuronal disorders. BioCircuit's core technology includes a bioinstrumentation platform for non-invasive stimulation and measurement of peripheral nerve activity.

### **JOB DESCRIPTION**

We are seeking a Senior Hardware Engineer to manage key projects for the company. The candidate will lead the design and manufacture of complex, mixed signal electronics for multichannel biosignal acquisition and stimulation.

The candidate will be responsible for analog and digital circuit design, development, testing, and debug for medical device instrumentation. The successful candidate will be capable of providing strong technical leadership on new development projects, while sustaining existing products.

### KEY JOB RESPONSIBILITIES

- Manage all phases of analog and digital system design (product specification, system architecture, component selection, schematic design, PCB layout, troubleshooting, and transition to manufacturing)
- Design to meet critical medical device safety, reliability, and regulatory requirements
- Work closely with a multidisciplinary team, including other engineers, scientists, and clinicians to successfully bring the product to market
- Create and support test protocols for the verification and validation of hardware and embedded software
- Perform analysis of data collected, root-cause sources of error in measurements, implement improvements in hardware, measurement methods, or signal processing
- Conduct risk analysis and implement corrective actions
- Tackle challenges and enjoy discovering, defining, and solving problems
- Manage projects to meet deadlines and budgets, with regular project updates

### **SKILLS & QUALIFICATIONS**

## Required

- Degree in electrical engineering, computer engineering, or similar
- One of the following:
  - o 5+ years experience in an industry-relevant field
  - MS and 3+ years experience in an industry-relevant field
  - PhD with some industry-relevant experience
- Extensive experience in board design (analog, digital, embedded systems, and power), system architecture planning, schematic capture, PCB layout, debug, testing, and transition to manufacturing
- Experience designing boards with embedded processors or FPGAs





- Design experience meeting safety and medical device standards
- Experience with troubleshooting and debugging
- Data analysis, signal processing, and programming (e.g., MATLAB, Python, C, LabView).
- Ability to work cross-functionally with applications, mechanical, software, and firmware engineers in a fast-paced start-up environment.
- Ability to function well in a self-driven, start-up environment and balance multiple simultaneous projects

### Desired

- Experience developing medical instrumentation in a regulated environment
- Experience with biosignal acquisition and/or stimulation
- Real-time embedded software development experience

### **FURTHER DESCRIPTION**

BioCircuit Technologies is a quickly growing start-up company, where you will have the opportunity to receive exposure to all facets of medical device development and clinical translation (e.g., concept development, patent applications, grant proposals, partnerships with clinicians, presentations, etc.) Your successful performance will lead to significant opportunity for continued growth and experience.

### **CONTACT INFORMATION**

If you are interested in this position, please send your resume and cover letter to <u>jobs@biocircuit.com</u>.

