

## **Embedded Systems Engineer**

BIOS, a small, growing start-up that designs and sells lighting systems tailored to the biological needs of people, plants, and animals; seeks an energetic, well organized and highly motivated embedded systems engineer comfortable in a dynamic startup environment.

### Essential technical skills

- Minimum, bachelor's degree in computer engineering or a related field + 5 years of experience outside of coursework in electronic design and programming of embedded systems, including use of common microcontrollers (PICs, Cortex series, etc.)
- Fluent with low-level C-language programming and debugging, revision control (git), and embedded software testing
- Solid understanding of analog & digital electronics, with the ability to design circuits and specify components
- Able to relate schematics, BOMs, & circuit card layouts to physical circuits
- Competent in electronic prototyping (bread-boarding, troubleshooting, basic simulation), soldering SMT components, and using tools for basic mechanical assembly
- Capable of schematic entry and BOM maintenance, comfortable with either PCB layout or working with layout engineers

### Essential personal skills

- Time management – the successful candidate must be able to meet commitments and manage his or her time
- Service oriented attitude – actively looking to assist and learn new skills
- Excellent verbal and written communications ability at a technical level with engineers, technicians, and scientists
- A good sense of humor

### Advantages

- Photometry and/or color science experience
- Background includes analysis of sensor data and machine learning
- Skillful with design of low-level communication circuits, such as RS-485, I<sup>2</sup>C, SPI, USB, and Ethernet
- Higher-level application development experience, such as Java, Python, SQL, & use of virtual machines
- Comfortable switching between Windows & Linux operating systems
- Experience working in small, fast-moving start-up work environments