

Reports to: Director of Engineering Department: Engineering

Classification: Exempt Last Updated: 09/17/2024

Job Summary:

We are seeking a highly skilled and experienced Senior Electrical Engineer with a proven track record in firmware development to join our dynamic engineering team. King Technology is investing in an expansion of our work in sensors and electronics. King's commitment to this development includes not only the creation of this full-time position but financial resources available for consultants as needed, purchase of required development equipment, fabrication of production level prototypes, and setup of our production partners. The person hired will have significant input on these areas of company investment and will be the technical lead of this expansion, influencing the products we develop in this area for years to come.

If you have a proven track record of results in the areas of complex electrical systems and firmware and have ever wished to setup a development using your preferred tools, this is that opportunity.

Essential Functions:

- Lead the design, development, and testing of electrical systems, including analog and digital circuits, power supplies and control systems.
- Develop and implement firmware for embedded systems, including microcontroller selection and programming, real-time operating systems (RTOS) and device drivers.
- Collaborate with cross-functional teams to define product requirements and translate them into technical specifications.
- Integrate into customer systems for power and communication
- Perform complex electrical simulations and analysis to ensure optimal system performance.
- Conduct thorough testing and validation of electrical systems and firmware to meet product specifications and industry standards.
- Provide technical guidance and mentorship to junior engineers.
- Stay up to date with the latest electrical engineering and firmware technologies.

Job Qualifications:

- Bachelor's degree in electrical engineering or a related field.
 - Minimum of 5 years of experience in electrical engineering, with a strong focus on embedded systems design.
 - Proven experience in firmware development using C/C++ or assembly language.
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- Proficiency in electrical design tools (CAD, simulation software).
- Solid understanding of analog and digital circuit design principles.
- Experience with microcontroller architectures and peripherals.
- Strong problem-solving and troubleshooting skills.
- Excellent communication and collaboration abilities.

Preferred Qualifications:

- Master's degree in electrical engineering.
 - Experience with specific microcontroller platforms (e.g., ARM, PIC, AVR).
 - Knowledge of wireless communication protocols (e.g., Bluetooth, Wi-Fi).
 - Experience with PCB design and layout.
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