Job Description

We are seeking for a full-time *Embedded Software Engineer* to expand its Product Development group. This role would be responsible assistance in firmware development for our new products PositiV and Manifest, in addition to maintenance and new firmware development for our flagship Intelli-Hood product. The ideal candidate is experienced at low-level embedded programming and can turn broad ideas into useful implementations. The Embedded Software Engineer would also be responsible for guided R&D into system improvements and data analytics. Embedded software development environments will vary from bare-metal implementations on 8-bit microcontrollers to embedded Linux development on a 32-bit ARM platform. The Embedded Software Engineer can heavily influence future hardware designs. This position will report to the Senior Development Engineer.

Essential Duties and Responsibilities:

- Write performance critical code in resource-limited environments, including low power, low memory, restricted bandwidth, CPU, etc.
- Test and document software.
- Use kernel debuggers, system dumps, and assembly language, as well as higher level languages.
- Write, modify, and debug software for embedded devices.
- Other duties as assigned

Qualifications:

- BA/BS in Computer Science, Computer Engineering or other related engineering/software discipline
- Two or more years embedded development work experience a plus
- C and Assembly embedded programming experience
- Familiarity with version control systems and issue trackers
- Familiarity with design and review processes
- Basic knowledge of schematics and hardware design
- Legal authorization to work in the United States
- Strong embedded debugging skills
- Linux software development, from the application level to the driver level
- Scripting language experience (i.e. PHP, Python, Perl)
- Cross-compiler experience in Windows or Linux
- Virtualization experience (i.e. VMware, Hyper-V, Docker)
- Experience with ARM, MSP430 and/or AVR microcontrollers
- Wireless communication experience (i.e. BLE, Zigbee, cellular)
- Serial and networking communication protocols experience (i.e. Modbus, BACnet, MQTT)

Physical Demands

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. While performing the duties of this Job, the employee is regularly required to stand; walk and talk or hear. The employee must frequently lift and/or move up to 10 pounds.

Competencies

To perform the job successfully, an individual should demonstrate the following competencies:

- **Extreme Ownership** - Takes personal responsibility for outcomes and perseveres in the face resistance or setbacks. Pursues everything with energy and drive.
- **Subject Matter Expertise** - Excels at his/her professional function, regularly demonstrating and sharing depth of knowledge and skills. Is a quick study.
- **Clear & Candid Communication** - Ensures that information is passed on to others who should be kept informed; has the courage to say what needs to be said.
- **Building Collaborative Relationships**- Cultivates trusting, respectful, professional relationships with colleagues and customers over time.
- **Planning & Problem-Solving** - Takes the steps necessary to deliver high quality results, on time and on budget.
- **Continuous Improvement** - Constantly seeks ways to improve the internal and external customer experience by delivering better, faster or less expensive products and services.