Job Title: **Senior Embedded Software Developer**

About EERS

Founded in 2014, EERS Global invents, designs, and tests in-ear advanced technologies to accelerate go-to-market of game-changing products. Our cutting-edge technology augments the human experience in communication in challenging situations, hearing protection, biometric and wellness monitoring, brain computer interfacing, and is repeatedly validated in the field and some have become an ANSI Standard.

Through co-development partnership, we bring a stream of new products to market. Beyond prototyping, we produce actual scalable, easily transferable, manufacturable product taking the development execution risk out of the equation.

A global centre of excellence in research in acoustics, audio and biosignal processing, in-ear technologies, and product development, we attract high-caliber scientists and engineers to our team. Our head office is located in the heart of downtown Montreal. We offer competitive salaries as well as a great team environment.

Job Description

We are looking for a **senior embedded software developer** to join our multidisciplinary R&D team! EERS Global is working with tier-one industrial partners on multiple projects to design next-generation in-ear devices and technologies. The developer will be involved in all phases of these projects and is expected to carry out a wide variety of tasks: from high-level architectural analysis to hands-on hardware debugging. We are looking for a versatile and passionate team member who can take ownership of multiple tasks.

Duties and Responsibilities

- Design and develop software and firmware for audio-related devices and associated testing & characterization benches
    - Low-level microcontroller configuration and peripheral device drivers
    - High-level applications
    - PC-based tools
    - Communication protocols
- Troubleshoot software, firmware, and hardware issues
- Conduct and participate in code reviews
- Collaborate with cross-functional R&D teams on new products and product evolution, in design and validation phases of systems modules
- Learn, own, and document current designs, maintaining accurate documentation throughout the development and testing process
- Comply with company and government standards, and safety regulations

Education
- Bachelor's degree in Electrical Engineering or other relevant discipline, or equivalent combination of education and experience.

Qualifications
- 5 years of relevant professional experience in embedded software development
- Extensive knowledge of the C language
- Familiarity with ARM Cortex-M micro-controllers, preferably from ST Micro
- Intermediate knowledge of the Python language
- Experience with GUI development and test automation
- Good electronics background: ability to understand schematics and PCB layouts, and use lab equipment such as an oscilloscope and a logic analyzer
- Git source control

Nice to have experience
- Strong background in embedded wireless systems and experience in integration of radio-frequency components (ex: Bluetooth, Wi-Fi) is very desirable
- Familiarity with audio integrated circuits and components
- Proficiency with an assembly language
- Design of medical products
- EMC testing and troubleshooting

Soft skills
- Great communication skills in English and French
- Ability to efficiently communicate and design ideas and solutions
- Strong writing and documentation skills in the context of working with tier-one customers and academic partners
- Problem solver who can think outside of the box and leverage past experiences to solve technical challenges
- Ability to work both individually and as part of a team in a fast-paced environment
- Excellent time management skills and ability to contribute to multiple projects at a time