Embedded Firmware Engineer

Infersens Ltd is a Cambridge, UK based startup, focussed on the development of smart sensor networks for the built environment, breaking new ground by developing the next generation of ultra-low power sensors with on-device ML.

Our current focus is on developing flow and temperature sensors that enable real-time and fully comprehensive monitoring of water infrastructure. In Q1 2024 we launched Cortense®, our first commercial product. Our sensors address a high unmet need - automating manual Legionella Risk Monitoring - a regulation-driven, global multi billion B2B market.

We are looking for an experienced **Embedded Firmware Engineer** to join us at this crucial stage in our company and who is excited to develop leading edge products as part of a fast-growing, friendly and ambitious team.

You will contribute to the definition of product and software/firmware architecture, including design decisions relating to embedded platforms such as middleware frameworks, and low power multitasking, and will be working closely with our growing embedded ML and firmware engineering team.

The ideal candidate will be able to demonstrate

- experience in design, development and debugging of multiprocessor embedded software/firmware in C/C++, including bare-metal and the use of RTOS in low power embedded applications
- Ideally, experience of STM32 and similar MCUs, and the implementation of digital communications protocols (eg ProtoBuf, I2S, SPI, I2C)
- Unified Modelling Language (UML) design experience
- experience with C/C++ unit test frameworks
- familiarity with CI/CD methods for embedded systems including HIL testing
- experience in the verification and testing of software/firmware using Test Driven Development
- familiarity with firmware debugging techniques such as oscilloscopes, logic analysers and hardware debuggers
- experience of low power wireless technologies (eg LoRaWAN)
- familiarity of Agile methodology and Jira task management (or equivalent system)
- experience of, or an enthusiasm to be part of, fast-paced start-up environments and new product innovation

Knowledge of DSP algorithms in the deployment of embedded ML is an advantage.

You will need to be a natural problem solver and able to work independently, flexibly and agile in a fast moving business environment. You will be excited by the opportunity to work in a start-up environment, learning about all areas of the business and with the opportunity to progress according to your skills and interests.

Join our dynamic team with offices in Cambridge and flexible remote work options. While remote work is available, occasional in-office collaboration will be required.

The successful candidate must, by the start of their employment, have permission to work in the UK. We regret that we are unable to offer sponsorship for this position.

Application closing date: 30.04.2024

Salary Range: £50-60k (full time equivalent), plus additional benefits

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Hours: full-time and part-time roles considered, flexible working

How to apply: please send a CV and cover letter/email to recruitment@infersens.com