

Algorithm and Firmware Engineer

IDEX Biometrics (IDEX) is a global company designing and selling biometric fingerprints solutions to multi-billion-dollar markets including smart cards, mobiles and the Internet of Things. The company is in the early phase of commercialization preparing for volume deliveries and is also developing next generation products.

Are you a highly motivated and talented engineer that loves working on embedded systems? Are you someone who wants to be part of a growing biometrics company and enjoys working with other highly talented engineers? Do you enjoy architecting and developing small footprint embedded software? Are you never satisfied with the status quo and passionate about innovation and developing best in class solutions?

Tasks and responsibilities:

- Participate in development of biometric algorithms, power management, host communication and diagnostic subsystems.
- Identify root cause and solve problems through careful analysis, modeling and simulations.
- Undertake open ended design and investigation activities based on internal and external customer input
- Design and implement firmware and ensure implementation meets requirements
- Work closely with System Engineering teams to perform technical analysis across multiple domains such as system-level partitioning, use-case definition, firmware subsystem architecture, sensor modeling and performance estimation, system power consumption for various use cases, power management and low-power design.

Expertise:

- Strong programming skills in C or C++ and a high-level language like Matlab or Python.
- Strong profiling skills (power and clock domains), power management (analog and digital) using oscilloscopes and logic analyzers
- Embedded low power systems using dedicated micro controllers
- SPI, I2C and USB communication interfaces
- Cortex-M0/M3/M4 micro controllers
- Able to work within a multi-discipline team
- Relevant product development is a benefit
- Mix of hardware, software and firmware experience highly desirable

Education:

- PhD, MS or BS in EE, CS or Physics with specialization in embedded programming or related subjects

Personal capabilities:

- Self-driven and able to deliver; excellent academic results
- Must be passionate about collaboration, with a strong desire to learn from others
- Creative, pragmatic and easy to work with; service-minded
- Interested and willing to handle a diverse portfolio of projects and assignments
- Good communicator, using English as the working language.
- Quality conscious and with an eye for detail
- Structured and documented work methods

Work Place:

- Full-time position in Wilmington, Massachusetts

Travel Activity:

- Occasional domestic and international travel, depending on projects