One Silicon Chip Photonics

OSCP

Embedded Systems Engineer

Headquartered in Montreal, Quebec, Canada, OSCPS Motion Sensing Inc., is looking for an Embedded Systems Engineer to work closely with our hardware and test engineers to design and implement real-time embedded systems for our photonics-based motion sensor product.

One Silicon Chip Photonics (OSCPS) Motion Sensing Inc. was founded in 2015 and focuses its activities on the development of Inertial Measurement Units (IMUs), based on Micro-Opto-Electro-Mechanical (MOEMS) accelerometers and Integrated-Photonics gyroscopes. The company is now developing a fully integrated optical solution for the autonomous vehicle market. We are building a young and creative team, specializing in the fields of optical devices design & simulation, micro-fabrication, and characterization.

The ideal candidate will have a strong expertise in microcontroller development tools and programming in C++ and Python. Hardware diagnostics skills should be strong. Hands-on experience with sensing in LIDAR, radar or photonics sensors will be a plus. We are looking for a self-motivated, ***meticulous,*** creative, leader with strong communication skills, who is a good team player, capable of independent work with minimum supervision.

Qualifications

- Excellent software engineering habits in safety critical embedded software development
- Strong background in data structures and algorithms.
- Solid understanding of embedded systems and RTOS for ARM based microcontroller (C language)
- Experience with hands-on electronics
- Minimum B.Sc. in Computer or Electrical Engineering or equivalent
- Minimum 2 years of hands-on ***industry working experience*** in embedded developmentor signal processing
- Deep experience in signal processing of electro-optical devices is a must
- Manufacturing test or design for test experience
- Highly ***meticulous*** and ***detail oriented*** to ensure that design specifications are applied as intended, that sufficient documentation is provided and that issues are resolved effectively.
- Excellent communication and interpersonal skills; highly effective in formulating and communicating concepts, ideas, strategy to internal / external parties
- Software development experience to ISO 26262 standard is preferred
- Participate in all hardware and software aspects of opto-electronics devices.
- Industry experience is absolutely required

Beneficial Expertise:

- Expertise with real-time operating systems
- CAN bus vehicle standard familiarity
- Manufacturing test experience
- Create, build, debug optical test setup for sensor characterization
- Develop and use automotive networking protocols on CAN, Ethernet, and PCIe