



One Silicon **Chip** Photonics

Optoelectronics Test Engineer

OSCP Motion Sensing Inc., is looking for an Electro-Photonics expert with experience in sensing technologies and more specifically, accelerometers and gyroscopes. The candidate will participate in the development of integrated photonics-based motion sensors adapted for e.g. self-driving cars and autonomous drones.

One Silicon Chip Photonics (OSCP) 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 electronics and photonics engineering as well as software interface, and more specifically on the interaction, propagation, analysis, and manipulation of optical waves. He/she will be an experimentalist with hands-on experience in the assembly and characterization of integrated optical devices, as well as deep knowledge of micro-optical sensors especially in the field of micro-optical resonators. 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

- Deep knowledge in **micro-optical sensors** preferably in the field of **micro-optical resonators**
- Minimum B.Sc. in Electrical Engineering, Electro-photonics, Physics (Optics) or equivalent
- Minimum 3 years of **industry working experience** in optoelectronics signal processing and/or Integrated-Photonics system design and test is a **must**
- Deep experience in signal processing of electro-optical devices is a **must**
- Hands-on experience working with optical components such as splitters, circulators, isolators, phase modulators, lasers, detectors, and software
- Leadership and strong communication skills
- 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.

- Tangible technical achievements, which might include relevant work experience, patents, successful projects or publications
- Dynamic project management skills, adaptive to fast-paced, creative start-up working environment
- Self-motivated, strong time management skills in order to reliably deliver solutions within budget and tight timelines to meet customer's expectations
- Excellent communication and interpersonal skills; highly effective in formulating and communicating concepts, ideas, strategy to internal / external parties
- Industry experience is absolutely required
- Experience in cleanroom, motion sensors and MEMS is a plus;

Responsibilities:

You will be responsible for defining inertial sensors (accelerometers, gyroscopes, and IMUs) test specifications and validation needs as well as studying and approving verification outcomes. This work leverages your ability to identify, create, and document new sensing system metrics that deliver performance related to user experience.

- PIC building blocks (Splitter, circulator, filters, resonators, etc..) characterization
- Previous experience with software OptiSpice, Lumerical Interconnect, Cadence Allegro/OrCad, Vivado, Matlab/Simulink, Spyder python, GCC/G++, Git, Altium Designer or Labview is a plus
- Working closely with hardware electronics team
- Create, build, debug optical test setup for sensor characterization, perform electro-optical experiments.
- Data analysis and reporting
- Participate in all aspect of the design of the opto-electronics devices.
- Procurement of optical, electro-optical and electronics parts based on performance needs.

Job Types: Full-time, Permanent