



QUINTESENT

### **JOB OPENING: Design Automation Architect (Photonics)**

Quintessent is a venture funded start-up spun out of UCSB. We are commercializing a new generation of optoelectronic components and circuits to power the growing connectivity needs of the future. Our team is growing rapidly and we are currently seeking candidates for a Design Automation Architect position specializing in the automation of the photonic device and photonic integrated circuit (PIC) design processes. The starting date for this position will tentatively be Fall of 2020.

**Employment type:** Full time.

### **Responsibilities:**

Core responsibilities include automating the procedures associated with the photonic device and photonic circuit design process. This includes aligning, consolidating, and automating the software for simulation, layout, fabrication design rules, testing, and analysis. The candidate will also need to participate in the simulation, layout, and fabrication design activities. The candidate will interface closely with a team of engineers responsible for various device and PIC design, layout, fabrication, test, and data analysis.

### **Qualifications:**

- Ph.D. degree in Physics, Applied Physics, or Electrical Engineering
- Extensive experience with III-V and/or silicon photonic device design, simulation, fabrication, and testing.
- Expert knowledge of mask layout software and process design kits (PDK), either custom developed in house or used with commercial foundries.
- Experience with simulation methods/software such as film mode matching (FMM), finite difference time domain (FDTD), and beam propagation
- Experience with computer programming such as Python scripts to perform simulations, interface with software, and perform data analysis.
- Effective communicator, collaborator, and project leader.
- Fast learner and problem solver.
- Meticulous attention to detail and consistency in execution.
- The ideal candidate will also have previous experience working with commercial foundries for device and/or PIC fabrication.

Position will remain open until filled by a qualified candidate. **For more questions or to apply for the position, contact: [hiring@quintessent.com](mailto: hiring@quintessent.com)**