

Senior Staff Electrical Design Engineer

Sense Photonics is seeking an experienced EE to play a critical role in designing and building next-generation, commercial-grade long-range LiDAR systems. Candidate must have a background in analog and digital circuit design, high power/high speed pulse generation, high power RF circuitry, GaN power FETs, laser diode drivers and photodetector array data acquisition or radar drivers. We are looking for a person with strong analytic and communication skills and the ability to work well in a dynamic, multi-disciplinary environment. The most qualified candidate will be selected to join our innovative, collaborative and dynamic team in our new R&D centre in Edinburgh, Scotland.

JOB RESPONSIBILITIES

- High speed, high power PCB and system design
- Analog and digital (mixed signal) PCB design
- Evaluation of RF characteristics of VCSEL arrays and driver circuits
- RF system design and integration
- Prototype development, testing and calibration
- Design, characterization and testing of electronic modules
- Layout/supervision of layout of PCB design
- Microcontroller and FPGA programming skills desirable
- Real-time sensing systems
- Collaboration with mechanical, firmware, hardware engineers
- General-purpose programming with at least one high-level language (Python preferred)
- Prepare technical reports, proposals and presentations

REQUIREMENTS

- Strong, in-depth understanding and proven hands on experience of high speed/high power pulse generation circuitry design and characterization
- Experience of full product design cycle from concept to qualification and production
- OrCAD schematic capture and Allegro PCB layout
- Experience with designs of challenging signal integrity, power integrity, EMI, EMC and thermal requirements
- 10+ years experience of embedded systems including FPGA/GPU, high voltages, PMICs, high-speed driver circuits, high-speed serial interfaces
- Demonstrated technical knowledge and expertise in commercial systems.
- Experience with LIDAR or RADAR systems preferred.
- Experience with automotive electronics a bonus

QUALIFICATIONS

- Advanced Degree in Electrical Engineering or a related technical field.



- Minimum of 10-15 years of industry experience.

ABOUT US

We are passionate about building the next generation of LiDAR systems for autonomous vehicles, UAVs, industrial automation and many other applications. Our core technology – protected by over 200 patents – enables a simple, high-performance, solid state solution with no moving parts that can uniquely meet the rigorous performance, reliability and cost requirements of the automotive industry. Sense Photonics was founded in 2016 and is based in Research Triangle Park, NC with offices in Edinburgh, UK and in Silicon Valley. We are well financed, backed by several top tier venture capital firms and have already developed strong customer traction for our solution. We are building an innovative world-class company that designs and builds the world's best 3D sensors. Sense Photonics is also an equal opportunity employer – all applicants will be given equal consideration.