

Camera Firmware Engineer

We are seeking an experienced, Camera Firmware Engineer for our Research Triangle, NC or San Francisco, CA development centers, to be a key contributor to engineering activities aimed at revolutionizing the world of LiDAR systems for autonomous vehicles, UAVs, industrial automation and other applications. You will be a key contributor in defining camera hardware design, embedded hardware and firmware design and development, digital design, simulation and schematic, PCB bring up, troubleshooting, and transfer to production.

JOB RESPONSIBILITIES

- Embedded camera hardware/firmware development for next generation LiDAR system
- Design embedded system for camera MIPI CSI-2 interface and peripheral digital circuits
- Develop camera firmware for high-speed data streaming and processing
- Write specifications for camera firmware and data interfaces
- Recommend new designs and/or changes to existing designs
- Full-cycle embedded system development including SOC/APU selection, processor selection, and connectivity to internal and external subsystems
- Develop custom drivers and board support packages
- Develop design requirements, bench prototypes, execute design simulations, integrate prototypes, conduct V&V testing, and deploy designs to production.
- Oversee design reviews and PCB layout activities
- Design for compliance and safety

REQUIREMENTS

- Bachelor's/Master's degree in Electrical or Computer engineering with >5 years industrial experience.
- Strong knowledge in camera firmware development over MIPI-CSI interfaces
- Experience with communication protocols such as MIPI, I2C, UART, CAN, Ethernet.
- Experience with Embedded Linux and RTOS Operation Systems.
- Experience with SoC platforms in Autonomous driving market a plus
- Familiar with Image signal processing and Computer vision.
- Working knowledge in automotive electrical hardware requirements and automotive communication protocols a plus
- Team player with strong interpersonal and communication skills.
- Must have good documentation skills

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.