

Senior Robotics Perception Engineer

Company Overview – Based in the heart of the Silicon Slopes, Inertial Sense is a rapidly growing, venture-backed company focused on autonomous navigation — because the world is beginning to move on its own. Everything from drones and robots to self-driving lawn mowers and autonomous cars need a low-cost navigation solution. We've developed the world's smallest and lowest cost GPS aided Inertial Navigation module and are combining additional sensor technologies to enable autonomy to happen at scale.

Position Summary – We are looking for an experienced robotics engineer to join our team of world-class navigation systems engineers and robotics experts in building disruptive solutions that give small vehicles the ability to perceive the world around them. Our system answers the questions where in the world am I, and what is around me. In this position, you will be leading a team to develop algorithms, write software, and integrate sensors and other hardware to build the company's core autonomy platform. We are looking for candidates with excellent communication skills, strong hands-on experience in all aspects of designing, building and testing embedded systems who are interested in changing the world while having some fun along the way.

Requirements

- MS degree or higher in computer science, electrical/computer engineering, or related field with a focus on robotics
- Strong systems engineering and robotics / embedded systems programming background
- 2+ years of professional or research experience with C/C++, Python, ROS, and Linux
- Sensor fusion systems including systems that fuse GNSS, Inertial, and vision-based input streams.
- Strong computer vision background with experience in areas such as: SLAM, Inference, Extended Kalman Filters, sensor fusion of LiDAR, IMU, Visual Odometry, OpenCV, and deep neural network (e.g. TensorFlow)
- GPU programming (e.g. CUDA, OpenCL)
- Agile methodologies, designing system architectures and guiding teams
- Ability to thrive when presented a complex challenge in a fast-paced, performance-oriented culture with intelligent people
- Exceptional level of integrity, raw intelligence, creativity, energy and passion

Experience / Familiarity with

- SLAM, RTK GPS, mobile robotics
- Visual Odometry, place recognition
- Structure from Motion, bundle adjustment
- Estimation: Kalman filters, Factor Graphs & Pos Graphs
- Machine Learning: Pytorch, Tensorflow, neural networks on edge devices, deep learning for object detection, semantic segmentation, image feature/description extraction.
- Programming in Linux: SoC: NVIDIA Jetson, RPI, C++ and Python, ROS1 & ROS2, OpenCV, Point Cloud Library, GTSAM, CERES or G2O

Benefits and Perks

- Utah - "Life Elevated" - skiing, biking, hiking - outdoor galore
- Paid holidays, Flexible PTO policy
- 100% coverage for medical benefits
- Wear many hats and be a part of an aggressive startup working to bring autonomous solutions to consumers

Applicants should send resumes to jobs@inertialsense.com.

Inertial Sense, INC

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