Senior Perception Engineer

About the Company

Spacer Robotics is building autonomous, non-humanoid robotic systems to construct infrastructure in extreme environments—from lunar bases to next-gen terrestrial job sites. Our vision is to disrupt the $16 trillion global construction industry by pioneering a new Deep Tech philosophy that blends robotics, AI, and systems engineering at the frontier.

About the Role

We're seeking a Senior Perception Engineer to join the core team building Spacer's production level robot. This role is highly hands-on and multidisciplinary, working at the intersection of hardware, sensors, and autonomy. You'll design, integrate, and validate sensor systems and perception pipelines for reliable robot behavior in real-world construction environments.

Key Responsibilities

- Own perception architecture from raw sensor data to planning/control inputs
- Lead integration of LiDAR, cameras, IMU, encoders, GPS, force/torque, proximity sensors
- Design sensor fusion pipelines (EKF, UKF, factor graphs)
- Develop object detection, segmentation, 3D perception
- Implement SLAM (LiDAR-based, visual-inertial, hybrid)
- Architect ROS2-based perception stack
- Optimize real-time performance on embedded compute platforms
- Select compute hardware (CPU/GPU/accelerators)

Qualifications:

- 6+ years in robotics perception & computer vision
- Expert in C, C++, Python
- Strong ROS2 experience
- Deep experience in SLAM, LiDAR, 3D point clouds, camera perception
- Experience delivering perception systems on physical robots
- High energy and enthusiasm for building physical products
- Based in or willing to relocate to the San Francisco Bay Area. Our team works in-person which is essential for hardware development

Compensation

The US base salary range for this full-time position is $140,000-$230,000 annually, depending on job-related knowledge, skills, and experience. As one of our early engineering hires, your equity stake will be meaningful and reflect the impact you'll have building our technology from the ground up.