Senior Path Planning 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 Path Planning Engineer to design and optimize navigation and motion planning systems for autonomous robots in complex construction environments. You'll be a technical self-starter who thrives with broad ownership, can make sound architectural decisions independently, and is energized by building real systems on physical hardware in unstructured environments. As an early hire, you'll shape our engineering culture and leave a lasting mark on how our robots think, see, and move.

Key Responsibilities

- Own planning architecture from global mission planning to local obstacle avoidance
- Develop global planners (A*, RRT, hybrid methods)
- Implement local planning & trajectory optimization (MPC, DWA, TEB)
- Integrate Nav2 or custom navigation frameworks
- Develop behavior trees & recovery behaviors
- Incorporate kinematics/dynamics constraints
- Architect ROS2-based planning stack
- Optimize real-time performance on embedded platforms

Required:

- 4+ years in robotics path/motion planning
- Expert in C, C++, Python
- Strong ROS2 experience
- Experience with global/local planning algorithms
- Proven experience delivering planning 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.