ANYbotics

Open Position

Navigation Software Engineer

ANYbotics AG is an ETH Zurich spin-off developing new solutions for mobile robots. Our quadrupedal robot is equipped with state-of-the-art perception sensors (LIDAR, stereo cameras, GPS) to provide autonomous inspection in challenging environments such as industrial sites, power plants, and subterranean systems.

We are seeking a Robotics Engineer to join our highly motivated development team to enhance the robot's ability to navigate in challenging environments autonomously.

You are responsible for the navigation software stack including path planning, obstacle negotiation, and high-level mission planning, which enables the robot to execute complete autonomous surveillance tours.

Your main tasks are to
- Develop and implement state-of-the-art methods,
- Integrate, test and evaluate third-party solutions,
- Debug and test the navigation software in the field with the robot,
- Develop, maintain and support the navigation software stack,
- Consult on sensor selection for hardware development.

You have a Master's or Ph.D. degree with a focus on robotic engineering and a strong track record with practical experience in robot navigation with the following skills:
- Extensive knowledge of state-of-the-art planning algorithms and techniques
- Must have a fundamental knowledge of modern map representations (pose graph, point cloud, signed distance fields, etc.),
- Experience with convex and nonconvex optimization solvers,
- Familiarity with SLAM,
- An understanding of mechanics and dynamics,
- Strong competence in object-oriented programming in C++,
- Experience with C++ libraries like Eigen, PCL, Boost or likewise,
- Experience with ROS and Linux,
- Comfortable with unit testing and debugging hardware systems.

You are an engaged personality used to work proactively and with precision - on your own and in the team. You enjoy the research environment of ETH Zurich to broaden your horizon, to get to know new technologies and to expand your skills continuously. Your profile is complemented by a good knowledge of English.

We offer an attractive working place in the center of Zurich, a market level salary, and an immediate start. As part of our young, highly motivated and dynamic team you will shape the future of our innovative and securely financed startup.

We look forward to your application including qualifications and cover letter on info@anybotics.com.

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