

Research Engineer – ROS, SLAM & Mapping for Robotics and AI Start Up

Job Title: Research Engineer

Reporting To: Research Manager

Deadline & Term: ASAP, Permanent, Full Time

Package: Salary + Performance Related Pay + Options Scheme

Location: SW London (Earlsfield)

The role:

Q-Bot is a high tech, high growth, international start-up, developing robotics and intelligent systems that will revolutionise the built environment. The company is now looking to hire a talented Research Engineer to join a rapidly growing, multidisciplinary product development team, in order to research and develop localisation, mapping and navigation capabilities for the company's robotics. The ideal candidate would have a good degree in Computer Science, Software Engineering, Robotics, Mechatronics or another relevant subject, combined with at least 3 years of experience developing robotics algorithms using C++, ROS, SLAM for a commercial applications.

This is an excellent opportunity to get involved high growth company as it scales, work within a creative and dynamic team, with many opportunities for career progression. To make the most of this exciting opportunity Q-Bot is looking for someone who is ambitious, driven, passionate about robotics/AI, and who will be motivated by seeing their efforts have a real and lasting impact. The successful candidate will be rewarded with an exciting and diverse role, and influence to shape research and the long-term strategy of the company. Salary will depend on experience and the successful candidate will also be invited to take part in the Employee Share Option Plan or performance related pay.

Duties of the job:

- Developing algorithms to perform mapping, state estimation, localisation, sensor fusion and ultimately autonomous navigation.
- Utilising state-of-the-art techniques in mapping / AI, improving existing algorithms where required, or alternatively developing new techniques.
- Performing tests, problem diagnosis, and debugging.
- Running experiments, analysing data and comparing results to theory.
- Researching a topic area, reporting and presenting back.
- Presenting and communicating ideas, including planning software development.
- Visiting customer sites and analysing products in situ.
- Project management of assigned projects/work packages.

Essential requirements:

- A good degree in Computer Science, Software Engineering, Robotics or another relevant technical subject.
- A minimum of 3 years relevant experience developing commercial robotic systems.
- Fluent in C++ with experience of ROS, SLAM and / or other robotic systems.
- Able to plan time, manage assigned deliverables, and work to deadlines.
- Excellent written and verbal communication skills (English).
- Must be eligible to work in the UK without restriction.
- Able to work effectively both as part of a team and individually.

Desirable skills:

- Application of Agile or other project management techniques.
- Experience with robot control systems, microcontrollers and electronics.
- Experience of deep learning and machine vision including computer vision libraries: OpenCV, PCL, etc
- Experience with dynamical modelling of robotic systems and model-based controller design.
- Experience with unmanned ground vehicles or anthropomorphic robots.
- Motivated and goal oriented.
- Shows initiative and diligent.

About Q-Bot:

Q-Bot is a high-tech start up at the forefront of robotics, sustainability and the built environment designing and building robots that help install insulation in existing homes at a fraction of the cost and disruption associated with traditional methods. The company counts a number of Local Authorities and Social Landlords among its customers (<https://www.youtube.com/watch?v=ZHeAqMQdFKw> & <https://www.youtube.com/watch?v=aw3K8GFMfg8>).

The intelligent construction robots developed by Q-Bot have a number of benefits:

- They empower operators, making them more efficient and productive.
- They allow easier, cheaper, safer and more effective execution of tasks than traditionally possible.
- They create buildings that are energy efficient, cheaper to run and more comfortable.

The company has a highly innovative technology platform with many exciting applications, a creative approach to tackling climate change, combined with a strong social agenda, helping people in fuel poverty and working with our customers to ensure a positive impact within the local community. The company's offices are based in Earlsfield, Wandsworth (South West London). Q-Bot is an equal opportunities employer and welcomes applications from all suitably qualified persons regardless of their race, sex, disability, religion, belief, sexual orientation or age.

Please apply to: future@q-bot.co with a covering letter and CV. **Please note: no recruitment agents, thank you.** If you don't fit this requirement exactly but are degree qualified robotics or software engineer with significant experience in at least one programming language feel free to e-mail a CV as you may be suitable for other positions we are recruiting for.

