

C++ Software Engineer

Reporting To:	Head of Product Development
Term:	Permanent, Full Time
Package:	Salary + Performance Related Pay + Options Scheme
Location:	London (Wandsworth)

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 looking to hire a talented Senior Software Engineer, to join a rapidly growing multidisciplinary Product Development team to take responsibility for the software and control systems used by the company's robots. The ideal candidate would have an Engineering or Computer Science degree, at least 5 years commercial experience in designing and building real time control systems using C/C++, knowledge of both low and high level environments (RTOS, and Linux), have strong maths and physics skills, be passionate about robotics, and a wish to develop solutions for real world applications.

This is an excellent opportunity to get involved with a high tech, high growth company and work within a creative and dynamic team. To make the most of this exciting opportunity Q-Bot is looking for someone who is ambitious, driven, and who will be motivated by seeing their efforts have a real and lasting impact. The successful candidate will be rewarded with an exciting, diverse, and demanding role which has many opportunities for career progression. Salary will depend on experience and the successful candidate will also be invited to take part in the Employee Share Option Plan (ESOP) and / or performance related pay.

Duties of the job:

- Leading the software development for the next generation robot platform.
- Creating robotic control systems, including motion control, localisation, vision, mapping and automation routines.
- Creating new GUIs, containing easy to understand visualisations of the underfloor environment.
- Planning and implementing software upgrades, taking responsibility for quality control and testing.
- Developing tools to analyse data from customer sites.
- Visiting customer sites to analyse robots in situ.
- Continuing good workflow practises (continuous integration, Git Flow)
- Assisting with R&D projects as required.

Essential requirements:

- A good degree in Computer Science, Robotics, or Engineering.
- A minimum of 3 years relevant professional experience.
- An independent and self-motivated worker.
- A good knowledge of threading.
- Experience writing clean and modular code, to SOLID principles.
- C++ knowledge (ideally C++11 or above).
- Experience of successfully planning, managing, and delivering software projects to deadlines.
- Must be eligible to work in the UK without restriction.

Desirable skills:

- Experience coding in a real-time-operating system (RTOS).
- Experience using Robotic Operating System (ROS).
- Experience with event buses.
- Knowledge of python or another language.

About Q-Bot:

Q-Bot is revolutionising the construction industry with robotics, digital tools and AI to transform archaic processes and enable new services for the inspection maintenance and upgrade of buildings. Q-Bot’s mission is to be able to measure and improve the health of buildings without the cost and disruption of traditional methods.

The company has commercialised a highly innovative method of applying under floor insulation using a [robotic device](#) and has a number of new services in development. As a result of this work Q-Bot has developed a number of exciting robotic and AI technologies which include robotic vehicles, digital manufacturing and 3D printing, control routines for autonomous localisation and navigation, 3D mapping of environments with automatic categorisation of features, as well as tools to manage the installation process and data collected.

The company has a growing team of 30 employees in offices in London and Newcastle. Q-Bot has state of the art equipment, including an in-house pick and place machine and 3-axis CNC milling machine. Q-Bot is run by an experienced management team with an entrepreneurial track record, project management expertise and unique blend of robotics and building know how. The company’s employees are a unique blend of engineers with Masters and PhDs in Science or Engineering and professionals with decades of practical experience in the construction sector.

Q-Bot is an equal opportunities employer and welcome 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.

