



Senior C++ Systems Software Engineer

£60000 - £80000/annum Bonus, Full benefits

Basingstoke, Hampshire

Our client is a well-funded, high-growth scale-up company aiming to disrupt and make history in the tunnelling industry and the wider world of engineering. There is an immediate requirement to hire a Senior C++ Systems Software Engineer within our growing team.

Role

You are a Senior C++ Systems Software Engineer who will report to the Head of Software. The company has built the world's first underground structure constructed entirely by a small fleet of swarming robots. They now plan to fully commercialise the process and will be further enhancing the software that will control the bots in a swarm as well as represent this entire process in a Digital Twin.

Responsibilities

- Develop and optimize C++ applications for data-acquisition, real-time data-processing, and control.
- Develop digital-twin rendering and simulation applications in a robotics context.
- Develop high-performance production applications and libraries from prototype code.
- Implement complex algorithms and data structures in C++ to solve specific problems e.g. robot scheduling.
- Design and implement system-components using modern C++ (11-20) and object-oriented methods.
- Work with multithreading and concurrency, understanding the intricacies of synchronization, race conditions, and deadlock resolution.
- Integrate third-party libraries and APIs for extended functionality.
- Write robust, testable, and maintainable code; conduct rigorous code reviews.
- Collaborate with a multidisciplinary team to define requirements and deliver innovative solutions.

Required Attributes

The applicant must be/have:

- Driven, enthusiastic and tenacious.
- Assertive character, able to clearly communicate with, and work effectively within the wider team.
- Ability to 'start simple' when addressing challenges or issues.
- Strong quality focus, but with pragmatic approach to achieve business outcomes.

- Innovative problem solver with conscious ability to differentiate short term and longer-term solutions.
- Details driven and happy to 'roll up your sleeves' to drive a solution to a successful outcome.
- Flexible approach and keen to learn new skills.

Qualifications and Experience

- Over 10 years of professional experience in advanced C++ development.
- Experience with Agile software-development practices.
- Proficient in advanced C++ concepts, including templates.
- Experience with real-time systems, performance and resource optimization.
- Familiarity with network programming, sockets, and communication protocols.
- Demonstrable experience with version control systems, preferably Github.
- Bachelor's or Master's degree in Computer Science, Engineering, or a related field.
- Contributions to major C++ projects or active engagement in the C++ community.
- Experience with multithreaded development (both task-parallel and data-parallel).
- Experience with object-oriented design and SOLID principles.
- Experience with CUDA or other GPU-compute platform/API (optional).
- Experience with Unreal Engine (optional).
- Experience with shader programming (HLSL etc, optional).
- Experience with Boost C++ libraries (optional).

Offer if successful

- Competitive salary plus the company benefits of Private Health Insurance, Life Insurance, Mobile Phone Allowance, Contributory Pension Scheme, Employee Share Option Scheme, Discretionary Bonus Scheme.
- You may be required to travel (both within the UK and internationally) for business purposes as required.
- If you are interested ,in this position please email your CV and confirm whether you have a British or Irish passport or have been granted a visa to work in the UK.
- Our client is an equal opportunity employer. They are committed to a work environment that respects, supports and inspires all individuals and in which HR processes are merit-based and applied without any discrimination.

Jake Garner

Tel: 01962 656288

Job Reference: CGJG06465