Senior Software Engineer

Semiconductor devices provide the foundations on which progress in the technology sector are enabled. From Smartphones to Artificial Intelligence, 5G communications to autonomous vehicles, all are made possible through advances in semiconductor processes. Scaling these processes requires sub-nanometer measurement of increasingly complex 3D structures to enable more powerful devices. At **Infinitesima** we have pioneered a revolutionary atomic precision 3D metrology technology which has been qualified by leading companies in the semiconductor industry and we believe is essential for continued progress. To quote Lord Kelvin, *'If you can't measure it you can't improve it!'*. Come and join our dynamic team to enable the semiconductors for tomorrow's technological developments.

Do you have experience in Desktop Application development and/or machine automation? We currently have an exciting opportunity for a Senior Software Engineer to join our team.

The prime function of the role is to assist in the further development our current application suite with an eye to the future development of our product. You will be expected to Lead small projects and work closely with Product, Project managers and Principal Engineers.

Location: Abingdon
Reporting to: Senior Software Manager

The Opportunity:

The position of Senior Software Engineer is part of Infinitesima' s cross-functional engineering team within Infinitesima. The individual is required to be part of a tight knit software group working on real-time machine control, automation, algorithm implementation, UI, data-analysis and contributing to areas such as diagnostics and predictive maintenance for our Metron3D platform.

Key Responsibilities:

- Help develop and document requirements.
- Help educate and advocate for software best practices and overall product quality.
- Participate in design and documentation reviews.
- Coordinate with multiple teams to understand requirements and get issues addressed.
- Look at the product holistically and rigorously to identify inconsistencies and issues.
- Collaborate effectively as part of an integrated software team whilst also being able to work independently.
- Work across functions (Systems Engineering, Mechatronics, Research, Electronics) to help identify issues and guide the optimal technology choices, architectures, and implementation.

Personal Qualities:

- Attention to detail and organisation.
- Collaborative and proactive.
- Courage to champion the user perspective and the quality of the project.
- Pragmatism to prioritize issues and prevent perfect being the enemy of great.

Education / Qualifications:

- Degree educated in Computer Science or relevant experience.
- Experience at a local level in Infinitesima' s core technology areas.

Professional Skills/ Abilities:

Essential
- Experience developing MS Windows desktop applications/UI (C#, WPF, Avalonia, etc.).
- Software experience using C# .Net Framework and .Net Core.
- Experience of IPC technologies and techniques (e.g. DDS, MQTT, ZeroMQ, RabbitMQ, NamedPipes, etc.).
- Software architecture (distributed systems, real-time control).
- Multi-Threading techniques.
- JIRA and Confluence or equivalents.
- Experience documenting technical requirements.
- Experience writing unit tests.
- Understanding of the principles of real-time machine control.
- Knowledge or experience of Agile methodologies.
- Good written and spoken English.

Preferred
- Knowledge of Python, C++, and other languages.
- Networking and Network Topology (TCP/IP, routing etc.).
- Systems Engineering understanding or appreciation.
- Containerisation e.g. Docker.
- Experience developing Linux desktop applications and services.
- Knowledge of Semiconductor Factory Automation standards (SECS/GEM, Cimetrix)
- Ability to travel e.g. twice a year for a week each time to end customer sites
- You have shipped products and features.

Benefits:

In addition to a competitive salary and an annual bonus. Infinitesima offers flexible working hours, hybrid working, 25 days annual leave, death in service and private health care benefits, personal pension contributions of 4% with salary sacrifice and a generous EMI Share scheme.

All qualified applicants will receive consideration for employment without regard to race, colour, religion, sex, sexual orientation, gender identity, national origin, or disability.