



Job Description: System Research 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.

We currently have an exciting opportunity for an System Research Engineer to join our Research & Development team,

The prime function of the role is to work flexibly within the R&D team developing innovative technology solutions to directly feed into the product development roadmap.

Location: Abingdon

Reporting to: Head of R&D

Key Responsibilities:

- Ideate, design, prototype, test and communicate software and hardware components in response to identified technology gaps within realistic and defined timescales.
- Writing object oriented (C#) and control software (Labview) to demonstrate proof of principle developments.
- Use and develop FPGA-based data capture, system control and signal processing components.
- Work effectively either individually or within an R&D team of experts in applications, optics, and control and alongside mechanics, electronics, systems experts within engineering.
- Work with engineering team to effectively transition technology from R&D led to engineering led.

Personal Qualities:

- Able to work independently, setting priorities for own work based upon the company goals and targets.
- Engages with other members of the company to bring the best solutions to the problem.
- Recognises the value that fellow company members bring to enhance own abilities.
- Supports colleagues with their tasks when critical to the company goals.
- Establishes themselves as the knowledge centre in own field.
- React and address both short- and medium-term issues and proactively take action to solve them.

- Focus on the company goal, avoid distraction, making timely decisions to achieve the target.

Education / Qualifications:

- Bachelor's degree or higher in engineering, physics or similar, coupled with industrial experience.

Professional Skills/ Abilities:

- Essential: Expertise both in software and hardware design and development working with measurement devices.
- Essential: >2 years' experience in industry in an engineering or research role.
- Essential: Experience working on complex instruments containing, for example, optics, electronics, software, motion systems.
- Preferred: Experience in micro/nano analysis or relevant fields and ideally with in probe microscopy (such as AFM).
- Preferred: Experience of similar role within leading-edge instrumentation, measurement, or advanced process tools.
- Preferred: Experience of Semiconductor or similar end-user industry.
- Preferred: Data analysis software (Matlab or similar) beneficial.

Benefits:

In addition to a competitive starting salary and a yearly bonus. Infinitesima offers flexible working hours, 25 days annual leave, personal pension contributions and 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.

Note to recruitment agencies: Infinitesima Ltd operates a Preferred Supplier List, and we do not accept unsolicited agency CVs. Please do not forward candidate details in response to this advert, or to any Infinitesima Ltd employees. Infinitesima Ltd is not responsible for any fees related to unsolicited CVs