



## Hardware/Software Integration 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 developing control and measurement code? If so, we currently have an exciting opportunity for a Hardware/Software Integration Engineer to join our R&D 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

### The Opportunity:

There is an opportunity to become central in the optimisation of the existing measurement and control functions of the tool to improve its core performance as well as developing control systems for incorporation within new R&D projects. Join our hi-tech team and work closely with our other experts in their field to deliver a World class metrology tool.

### Key Responsibilities:

- Ideate, design, prototype, test and communicate software and hardware components in response to identified technology gaps within realistic and defined timescales.
- Use and develop FPGA-based data capture, system control and signal processing components.
- Writing control and measurement software (principally LabVIEW, Python) to demonstrate proof of principle developments.
- 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 to engineering.

### 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: >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.
- Essential: Expertise both in software and hardware design and development.
- Preferred: Experience of programming with LabVIEW and/or Python.
- Preferred: Experience of similar role within leading-edge instrumentation, measurement, or advanced process tools.
- Preferred: Experience in micro/nano analysis or relevant fields and ideally with in probe microscopy (such as AFM).
- Preferred: Experience of Semiconductor or similar end-user industry.

### Benefits:

In addition to a competitive starting salary and a yearly bonus. Infinitesima offers flexible working hours, Hybrid working with up to 50% home working 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 only works with approved agencies and does not accept unsolicited agency CVs. Please do not submit 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.*