



## **Instrumentation Engineer (Senior/Principal)**

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.

### **The Opportunity:**

Are you a systems thinker with a passion for multidisciplinary engineering? Do you excel at integrating diverse engineering principles to solve complex problems? If so, we invite you to join our dynamic Systems Team as a Principal or Senior Engineer, working on the development of existing and next generation AFM instrumentation products.

This role is suited for a multidisciplinary-, systems-, instrumentation-, hardware- or development-engineer with an interest in systems who would like to grow further in that domain. It requires working with strong problem-solving skills to define, evaluate and improve requirements and performance criteria of complex systems across a diverse range technical disciplines including mechanics, electronics, motion, control, optics, and software. You will also be an advocate for promoting best practice and working with stakeholders to ensure technical and functional compliance.

Location: Abingdon

Reporting to: Systems Manager

### **Key Responsibilities:**

- Apply systems thinking to define and manage (sub-) system specifications and breakdowns, ensuring alignment with project goals and performance criteria.
- Assess, manage and improve (sub-) system performance (and budgets), ensuring a clear understanding of how each module impacts overall system performance.
- Collaborate with cross-functional teams to design, develop, and integrate complex (sub-) systems that incorporate mechanical, electrical, control and software components.
- Work hands-on with the equipment and apparatus to build an in-depth understanding of the machine operating characteristics and prove performance of the implemented designs.
- Prepare and maintain various types of documentation.
- Support applications, manufacturing and service in fault identification and resolution.

## **Personal Qualities:**

- Self-management: Able to work independently, setting priorities for own work based upon the company goals and targets.
- Teamwork: Engages with other member for the company to bring the best solutions to the problem. Recognise the value that fellow company members bring to enhance own abilities. Supports colleagues with their tasks when critical to the company goals.
- Impact and Influence: Establishes themselves as the knowledge centre in their own field.
- Ownership & Initiative: React and address both short- and medium-term issues and proactively takes action to solve them.
- Results Orientation: Focus on the company goal, avoid distraction, making timely decisions to achieve the target.

## **Education / Qualifications:**

- Either a BSc/BEng in Physics, Engineering or similar, or a clear equivalent path through engineering apprenticeship and design/development positions.

## **Professional Skills/ Abilities:**

### *Essential*

- >5 years' experience in a multidisciplinary engineering domain.
- Experience working on complex instruments containing several of the following: mechanics, electronics, software, motion systems, control systems, acoustics, optics or similar.
- Experience of planning and addressing complex tasks and activities.
- Excellent communicator at all levels - Fluency in written and oral technical English.

### *Desirable*

- Experience of Systems Engineering within leading-edge instrumentation, measurement or advanced process tools, preferably for the Semiconductor or similar end-user industry.
- Experience of project management methodologies and technical documentation.
- Experience in micro/nano analysis or relevant fields and ideally with in probe microscopy (such as AFM).
- Experience in areas such as: FMEA, test automation, environmental testing would be advantageous.
- Technical lead on several projects.

## **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.*

*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.*