



Senior Systems 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.

The Opportunity:

We currently have an exciting opportunity for a Senior Systems Engineer to join our Engineering team, working as part of the team of engineers and scientists to drive the development of existing and next generation AFM instrumentation products. A key contribution to the product success is the specification, evaluation and improvement of system performance and architecture.

The role requires working with strong problem-solving skills to define, evaluate and improve design requirements and performance criteria for complex systems across a diverse range technical disciplines including mechanics, optics, lasers, electronics, motion control, and software. It will also include promoting best practice and working with stakeholders to ensure technical and functional compliance within a small but growing multidisciplinary team.

Location: Abingdon

Reporting to: Systems Manager

Key Responsibilities:

- Own key elements of the system and sub-systems
- Define and maintain system functionality breakdowns to mechanical, electronic, optical and software modules.
- Specify the overall (sub-) system design, defining the contributions from mechanics, optics, electronics and software and communicate to all contributors.
- 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.
- Evaluate and maintain system performance budgets – understanding how each module contributes to the total system performance.
- Feed forward learning from integration testing into new designs.
- Support applications, manufacturing and service in fault identification and resolution
- Communicate effectively at all levels with diverse set of peers, customers, and vendors
- Work effectively and flexibly as part of a multidisciplinary team
- Prepare and maintain documentation when required

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 positions.

Professional Skills/ Abilities:

Essential

- >5 years' experience in a multidisciplinary domain throughout the complete design lifecycle from concept to mature product support.
- Experience working on complex instruments containing several of the following: optics, mechanics, acoustics, electronics, software, motion systems, control systems. .
- Experience of planning and addressing complex tasks with innovative solutions.
- 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 in micro/nano analysis or relevant fields and ideally with in probe microscopy (such as AFM).
- Experience of project management and methodologies.
- Experience in areas such as: FMEA, test automation, environmental testing, compliance would be advantageous.

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.