Candidate Information

Position: Senior Engineers
School/Department: Momentum 1.0
Reference: 26/113766
Closing Date: Monday 21 December 2026
Salary: £42,972 - £56,004 per annum
Anticipated Interview Date: Thursday 21 January 2027

JOB PURPOSE:

To provide specialist technical expertise and leadership in the delivery of collaborative research, development and innovation projects with industrial partners and Momentum 1.0. The role will independently lead and coordinate defined engineering projects or significant technical workstreams, exercising professional judgement in the development of complex technical solutions, managing associated technical activities and resources, and providing technical direction and guidance to colleagues to ensure successful project delivery.

MAJOR DUTIES:

1. Plan and execute the design and development of software components and proof-of-concept demonstrators incorporating cutting edge AI, cyber security technologies and other newly developed capabilities emerging from Momentum One Zero's sectoral Hubs and affiliated research groups.
2. Lead and coordinate defined engineering projects or significant technical workstreams, exercising independent professional judgement within agreed objectives; plan and monitor technical activities, resources, risks and deliverables.
3. Produce high-quality technical reports and deliverables to enable commercialisation or assist in generating funding opportunities to support further programme activity.
4. Provide technical direction, coaching and mentoring to engineers and project colleagues and, where applicable, supervise or line-manage staff in accordance with agreed responsibilities.
5. Assist with the raising of substantial funding from industry and major government sources, nationally and internationally, collaborating on funding applications and supporting client-facing scoping sessions.
6. Help develop the international reputation of M1.0 through presentations, attendance at tradeshows and visiting major companies and research centres worldwide.

ESSENTIAL CRITERIA:

1. Honours Degree, or equivalent, in Electrical/Electronic Engineering, Computer Science or related discipline. OR;
   Minimum HND in a related discipline with extensive recent and relevant industrial experience.
2. Demonstrable significant experience of product development involving software or hardware design, including:
   - Evidence of taking technical responsibility for a software or hardware/software project from initial requirements to delivery.
   - Evidence of working with stakeholders to turn an initially ambiguous problem into agreed technical requirements, a feasible solution and measurable success criteria.
3. Highly proficient in at least one major language (like Python, C, C++, Java, Rust, VHDL, or Verilog) and have solid experience with modern git-based workflows and version control;
   - Evidence of designing and implementing a substantial component or system using at least one major language, and using collaborative Git workflows, including branches and pull/merge requests

4. Demonstrable practical experience in at least one of the following.
   - AI and machine learning: developing or integrating models or AI-enabled applications.
   - Cyber security and secure engineering: secure software development, threat modelling, security testing or vulnerability assessment.
   - Cloud and data systems: cloud services, distributed applications, data pipelines or deployment infrastructure.
   - Embedded and connected systems: firmware, FPGA development, hardware/software integration or connected-device engineering.
   - AI assurance: evaluating AI systems for properties such as robustness, security, reliability or explainability.
5. Effective team working skills in a multidisciplinary, cross functional setting;
   - Evidence of providing technical guidance to other engineers through activities such as design reviews, code reviews, mentoring or coordinating a technical work package.
6. Ability to communicate complex information clearly in both written and spoken English to a range of stakeholders.
7. Willingness to visit collaborative partners and to attend meetings and conferences nationally and internationally as requested.

DESIRABLE CRITERIA:

1. MEng, MSc or Ph.D. in a relevant area.
2. Hands-on experience with modern AI frameworks (PyTorch, TensorFlow, Hugging Face) or Computer Vision.
3. Cyber security or Cloud computing professional certifications.
4. Demonstrable experience in Systems Engineering, Agile development or Continuous Integration (CI/CD) pipelines