

# **Candidate Information**

Position: School/Department: Reference: Closing Date: Salary: R&D Programme Manager The Institute of Electronics, Communications and Information Technology (ECIT) 18/106756 Tuesday 2 October 2018 £49,261 - £62,205 per annum (potential to progress to £65,983 per annum through sustained exceptional contribution) week commencing 15 October 2018

Anticipated Interview Date:

## JOB PURPOSE:

To provide engineering support to CSIT's research teams.

### MAJOR DUTIES:

- 1. To translate research prototypes into fully architected software/hardware security components and solutions displaying the quality characteristics necessary for integration into viable commercial products.
- 2. Provide strong technical leadership to engineers and project teams giving them direction on system design across a broad range of platforms and technologies. For example, data analytics workflows, machine learning frameworks, anomaly detection techniques, operational resilience and situational awareness.
- 3. Promote quality software/hardware development practices across the research and development teams.
- 4. Ensure reliable delivery of projects via effective planning, monitoring and control.
- 5. Promote open innovation and drive technical engagement with CSIT Industrial Advisory Board members.
- 6. Lead the design, development, delivery and maintenance of various CSIT concept demonstrators.
- 7. Produce high quality technical reports and deliverables to enable commercialisation or assist in generating funding opportunities to support further programme activity.
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- 9. Help develop the international reputation of CSIT through presentations, attendance at trade-shows and innovation events worldwide.
- 10. Undertake any other duties that may reasonably be requested by management.
- 11. Provide mentoring and training to engineering staff (line reports) as appropriate.

#### Planning and Organising:

- 1. Liaise with other team members to achieve coordinated progress against objectives
- 2. Plans own work and the work of others to meet given objectives and processes.
- 3. Engaging and influencing senior stakeholders and advisory board in the progression of activities.

#### **Resource Management Responsibilities:**

- 1. Provide guidance as required to supporting staff assisting with innovation activities.
- 2. Ensure research and development facilities and resources are used in an effective and efficient manner.
- 3. Responsibility for work of others and allocation of resources as required.
- 4. Responsible for line management and on-going development of individuals as outlined by current HR policy.

#### Internal and External Relationships:

- 1. Initiate and sustain engagements with team members to facilitate progress against objectives.
- 2. Participate in external engagements with commercial partners and government agencies related to innovation programmes as required.

#### ESSENTIAL CRITERIA:

- 1. 2:1 Honours Degree, or equivalent, in Computer Science, Electrical Engineering, Mathematics or related discipline.
- 2. Must have significant R&D or industrial product design experience in cybersecurity related areas.
- 3. Excellent software development skills in high-level languages such as C, C++, Java, Python, or R. A strong background in the use of code configuration management and continuous integration toolsets.
- 4. Strong technical excellence as evidenced by architecting multiple, major, software and/or hardware products over an extensive career. Relevant peer reviewed publications may also be acceptable.
- 5. Successful track record in leading, managing and mentoring a team.
- 6. Strong track record of designing and delivering complex R&D projects.
- 7. Ability to communicate complex information clearly in both written and spoken English.
- 8. Evidence of strong presentation skills and ability to prepare clear and concise presentation materials.
- 9. A consummate team player who is open-minded and is prepared to work closely with other members of a large multidisciplinary research and development team.
- 10. Willingness to attend meetings and conferences nationally and internationally as requested, i.e. must be prepared to travel.

### DESIRABLE CRITERIA:

- 1. MEng, MSc Cybersecurity, or a Ph.D. in a relevant area.
- 2. Cyber security professional certifications (CISSP, CEH etc.)
- 3. Experience of working in high technology start-ups.
- 4. Practical experience of using data analysis work benches and machine learning frameworks.
- 5. Project management as principal investigator, co-investigator, or work package leader.
- 6. Previous experience of developing project funding proposals from competitive sources. Commercial sponsorship (for example contract R&D activity) is also relevant.
- 7. Sufficient breadth and depth of specialist knowledge in the discipline and of research and development methods and techniques to work within established research programmes.
- 8. Ability to interact constructively with others including senior academic staff and industrial/government collaborators.
- 9. Stable, hard-working personality with a strong drive to complete projects on time and to deliver the promised outcomes.