Candidate Information

Position:	Research Fellow in Security of Future Networks
School/Department:	School of Electronics, Electrical Engineering and Computer Science
Reference:	25/113076
Closing Date:	Monday 26 January 2026
Salary:	£41,519 - £49,536 per annum
Anticipated Interview Date:	Monday 23 February 2026
Duration:	20 months

JOB PURPOSE:

To be a highly productive, ambitious and collaborative member of the NSS group within the Centre for Secure Information Technologies developing, implementing, and demonstrating secure, programmable next-generation networks. In particular, the postdoctoral fellow will take a lead role in investigating novel methods to address the cyber security of future flexible and programmable communication networks (6G/Satellite/Space-air-ground integrated networks).

This is a unique opportunity to contribute to secure next generation communication networks and work at one of the leading institutions in the UK in cyber security, the Centre for Secure Information Technologies – Queen's University Belfast, collaborating with academic and industry partners.

MAJOR DUTIES:

1. Undertake research investigating the security of programmable network technologies in space-air-ground integrated networks (SAGINs).
2. Design, develop and refine methods for securing SAGINs taking account of programmable networking technologies and the application of machine learning for network security.
3. Carry out in-depth analyses, experimental tests, and critical evaluations of the proposed methods on physical or emulated network testbeds.
4. Produce high-quality research outputs e.g., publications in top-tier journals, software artefacts etc.
5. Present and promote research milestones and outputs internally and externally at national or international events.
6. Assist in the preparation of funding proposals and applications to external bodies.
7. Carry out occasional educational supervision, demonstrating or lecturing duties within the post holder's area of expertise and under the direct guidance of a member of academic staff.
8. Undertake supplementary duties relevant to the success of the research and CSIT including administrative duties and additional training and development activities as required.

ESSENTIAL CRITERIA:

1. Have (or be about to obtain) a PhD in Computer Science or a relevant field.
2. A demonstrable research record in an area related to cyber security and programmable networking.
3. Demonstrable competency in network programming (e.g., hands-on experience with P4, bmv2 and Mininet or OpenFlow SDN) or network security systems design (e.g., software implementation of intrusion detection systems).
4. Strong publication record commensurate with stage of career.
5. Ability to contribute to broader management and administrative processes.
6. Contribute to the School's outreach programme by links with industry, community groups etc.
7. Practical problem solving skills, independence of thought and initiative.
8. Ability to assess and organise resources.
9. Ability to communicate complex information in English effectively in oral and written format.
10. Ability to build relationships to develop internal and external networks.
11. Commitment to continuous professional development.

DESIRABLE CRITERIA:

1. Experience in successful research with external partners (e.g. joint research publications or deliverables).
2. Competency in applied machine learning (e.g., skills in designing and implementing ML models in Keras, PyTorch or Tensorflow for practical use cases).
3. Interest in cyber security skills development with Schools, community groups etc.
4. Experience in funding proposal writing.Sandra Scott-Hayward (s.scott-hayward@qub.ac.uk)

ADDITIONAL INFORMATION:

Informal enquiries may be directed to: Sandra Scott-Hayward at s.scott-hayward@qub.ac.uk.