

Candidate Information

Position: Lecturer in Hardware & Embedded Systems Security
School/Department: School of Electronics, Electrical Engineering and Computer Science
Reference: 25/112978
Closing Date: Monday 17 November 2025
Salary: £51,016 - £62,695 per annum
Anticipated Interview Date: Friday 28 November 2025
Duration: Permanent

JOB PURPOSE:

To contribute to our ambitious research agenda by undertaking research in hardware and embedded systems security within the Centre for Secure Information Technologies (CSIT) aimed at developing the UK's cyber security capability. Undertaking world class innovative research programmes, successful candidates will also teach undergraduate and postgraduate students in the School of Electronics, Electrical Engineering and Computer Science (including computer science modules). The role holder will contribute to administration/outreach activity, specifically developing links with a range of national and international industry partners.

MAJOR DUTIES:

Teaching:

1. Develop the teaching activities of the School by pursuing new and innovative teaching approaches taking the responsibility for the quality of course units and delivering a range of teaching and assessment activities at undergraduate and/or postgraduate level within computer science, including lectures, setting/marking coursework, and practicals.
2. Supervise undergraduate and postgraduate taught students in practical and project-based work as appropriate to the relevant courses of study.
3. Contribute to student recruitment (including Open Days etc.) and student support mechanisms e.g., Personal Tutor Scheme.
4. Contribute to the School's internationalisation efforts with a view to attracting international students to the School, across all School programs.

Research:

1. To lead and undertake research in one or more of the following research areas in hardware & embedded systems security: applied cryptography, semiconductor security, EDA security verification, side channel/fault analysis, that is of a quality that is internationally excellent in terms of output, originality, significance, and rigour.
2. Supervise relevant research programmes within CSIT and the School's research structures individually and as part of a team.
3. Regularly publish research in international peer reviewed journals or archival conferences (e.g., IEEE & ACM) in the subject area, with a high majority of publications in the top-quartile of venues in the subject area and a significant number of publications in the top-decile, depending on career stage.
4. Source and secure external funding from the relevant funding bodies to ensure continued growth.
5. To work as part of a team to undertake innovative, ambitious impactful research programmes.
6. Demonstrate and enhance relevant measures of esteem that will strengthen the international reputation of CSIT and the School.
7. Demonstrate the potential for research impact, both within the academic discipline (e.g., citation impact) and beyond the academic discipline (e.g., economic, or societal impact).
8. Where appropriate, explore opportunities to exploit research through the appropriate commercialisation vehicle e.g., spin-out company, licensing deals, knowledge transfer partnership, contract research etc.
9. Demonstrate ability to engage, mentor and develop post-graduate or post-doctoral researchers.

Administration/Contribution to the Community:

1. Contribute to CSIT and the School's outreach and internationalisation strategies by developing external links.
2. Carry out designated CSIT and School administrative duties including, for example, committee work, working group leadership or course administration.

3. Demonstrate experience in administration and leadership roles.
4. Active participation in and support of the Personal Development Review (PDR) process.

ESSENTIAL CRITERIA:

1. PhD in Electronic Engineering, Computer Science, Computer Engineering, or closely related discipline.
2. Recent, relevant postdoctoral research experience in cybersecurity.
3. High quality research (commensurate with career stage) in hardware & embedded systems security, as evidenced by verifiable involvement in the generation of milestone papers in leading conferences and journals or major funding initiatives.
4. Evidence of independent contribution in research projects and outputs and potential to establish an independent sustainable research program.
5. Evidence of potential to secure research income.
6. Teaching experience commensurate with career stage, this can include, but is not limited to, undergraduate or postgraduate teaching, assessment, and/or industrial training activities.
7. A record of collaboration with and links to industry, or other activities aiming at achieving broader societal and economic impact.
8. Evidence of the ability to plan and deliver a programme of research and identifying suitable sources of funding.
9. Ability to communicate complex information effectively.
10. Understanding of resource management processes and skills to apply them effectively.

DESIRABLE CRITERIA:

1. Completed PGCHET (or equivalent) with HEA membership.
2. Significant research expertise in relevant areas depending on academic position, as follows: Semiconductor security, EDA security verification, side channel/fault analysis, applied cryptography.
3. Strong peer reviews of teaching.
4. Teaching awards.
5. Measurable societal and economic impact, in particular contribution to industry roadmaps and technology transfer to industry, with associated evidence.