Research Role Profile

Job Title:	Research Fellow B

Responsible to:	Head of research group, or principal investigator

Responsible for:	Responsibility for staff within own research group

Job Summary and Purpose

To plan and deliver research in accordance with the specified research project. To contribute to securing funding for own research projects and for projects for those staff under their direct supervision.

Main Responsibilities/Activities

To contribute to the development of the research of the Faculty, by planning and carrying out research activity within a specified area, often in collaboration with colleagues.

To take a significant role in planning, co-ordinating and implementing research programmes and, where appropriate, commercial and consultancy activities. To take lead responsibility for a small research project or identified parts of a large project. This may include planning fieldwork, data analysis and evaluation and laboratory experimentation. To make decisions about research programmes and methodologies, often in collaboration with colleagues, and to resolve the problems of meeting research objectives and deadlines.

To develop new concepts and ideas to extend intellectual understanding. Assess, interpret and evaluate the outcomes of research, and develop ideas for the application of research outcomes. To take a role in the regular publication of results in appropriate journals, in giving presentations at national and/or international conferences, and in other outputs as required and/or appropriate.

To develop innovative research proposals (as a self-contained item or as part of a broader programme), identifying sources of funding, submitting funding bids, and gaining positive reviews for these. Promoting own area of research.

Continually to update knowledge and develop skills. To extend, transform and apply knowledge acquired from scholarship to research and appropriate external activities.

To carry out management and administrative tasks associated with specified research funding, including managing and developing staff within their projects; risk assessment of project activities; organisation of project meetings and documentation; management of resources, preparation of annual reports, and management or monitoring of research budgets. To oversee and implement procedures required to ensure accurate and timely formal reporting and financial control.

To undertake liaison with external organisations including equipment manufacturers, steering committees, associated academic facilities and commercial users.

Research Role Profile

To contribute to teaching within the Faculty by carrying out student supervision, demonstrating or lecturing duties within the post holder's area of expertise. May be required to contribute to the supervision of research students.

Person Specification

The post holder must have:

Normally a doctoral degree in a relevant discipline, together with appropriate experience of working in a similar area of work.

The post holder will need to demonstrate a high level of competence and independent standing in research by being nationally recognised within their area of discipline, publishing regularly in recognised appropriate journals and attracting research funding for their own work or for other staff within the research group.

Relationships and Contacts

The post holder may have a key responsibility to the principal investigator, with prime responsibility for reporting and liaison with external funding bodies or sponsors. As a senior member of the project team, the post holder will also supervise the activities of research and technician staff within the particular research group.

Special Requirements

To be available to participate in fieldwork as required by the specified research project.

All staff are expected to:

- Positively support equality of opportunity and equity of treatment to colleagues and students in accordance with the University of Surrey Equal Opportunities policy.

- Help maintain a safe working environment by:

  - Attending training in Health and Safety requirements as necessary, both on appointment and as changes in duties and techniques demand

  - Following local codes of safe working practices and the University of Surrey Health and Safety Policy

- Undertake such other duties within the scope of the post as may be requested by your Manager.

UNIVERSITY OF SURREY

Research Role Profile

Addendum to Role Profile

Job Title:	Research Fellow (B)in Secure Systems

Job Summary and Purpose:
This information sheet should be read in conjunction with the accompanying generic Research Fellow B Role Profile and will be used for shortlisting processes. More specifically the post holder will be expected to: Undertake research in the verification of secure systems with a particular focus on authentication and attestation techniques that encompasses passwordless technologies and IoT systems.

Main Responsibilities/Activities
- To undertake a range of research activities within the project area, assuming lead responsibility for specific areas of the research in particular for the security modelling, analysis and critical evaluation of systems in the areas of future authentication technologies, and making use of new research techniques and methods, in consultation with the investigator and the wider research team;   - Leading on driving the research direction of the research activity in collaboration with others, developing new research methods and extend the research portfolio;   - Taking the lead on details analysis and interpreting results of own research;   - Develop and foster links with other external researchers and develop industrial collaborations;   - Lead on writing up results and preparing papers for submission to appropriate journals and highly-rated conferences within the field of verification and security, and other outputs as required and/or appropriate;   - Contribute to the development of ideas and writing of both technical and interdisciplinary grant proposals both technical related to the project area;   - Perform any other duties associated with the result as deemed appropriate by the supervisor.

Research Role Profile

Person Specification
The post holder must have:

Essential

- A PhD in Computer Science, Mathematics, or other closely related area.
- Post-doc or comparable experience in secure systems and/or in verification techniques and/or cryptography.
- Understanding of cyber security.
- Strong critical thinking skills and ability to develop novel solutions.
- Ability to communicate effectively and work efficiently within a research team.
- Experience in taking initiative and work independently.
- Experience of presenting ideas to other experts in the area, as evidenced by conference presentations, seminars, invited talks, or similar.

Desirable

- Evidence of growing track record of peer-reviewed publications, or other similar output.
- Experience of using security analysis tools (e.g. Tamarin, Squirrel), and/or theorem provers (e.g. Isabelle, Coq) and/or model checkers (e.g. NuSMV, Spin, PAT).

Relationships and Contacts

Direct responsibility is to the principal investigator, Professor Helen Treharne. The successful applicant will also work with researchers and PhD students within the Surrey Centre for Cyber Security, including Professor Ioana Boureanu and Dr Sasa Radomirovic, and with a possibility to work with local and international collaborators.