Research Role Profile

Job Title:	Research Fellow in Integrated Circuit Design

Responsible to:	Principle Investigator

Responsible for:	Testbed Development

Job Summary and Purpose:
To undertake research in accordance with the specified research project(s) under the supervision of the principal investigator.

Main Responsibilities/Activities
To undertake a range of research activities within a specified research area, assuming responsibility for specific areas of the project and making use of new research techniques and methods, in consultation with the research award holder or supervisor. This may include algorithm development, computer-based simulations, critical evaluation and interpretation, data analysis and evaluation.

To use initiative and creativity to identify areas for research develop new research methods and extend the research portfolio. Analysing and interpreting results of own research. Write up results and prepare papers for submission to appropriate journals and conferences, and other outputs as required and/or appropriate. Attend appropriate conferences for the purpose of disseminating research results of personal development. The post holder may also contribute to writing bids for research grants and will contribute to collaborative decision making with colleagues in areas of research.

Continually to update knowledge and develop skills, and translate knowledge of advances in the area into research activity.

To plan and manage own research activity in collaboration with others. To carry out administrative tasks associated with specified research funding, for example risk assessment of research activities, organisation of project meetings and documentation. Implementation of procedures required to ensure accurate and timely formal reporting and financial control.

The post holder may be required to supervise more junior research staff.

Research Role Profile

Person Specification
The post holder must have:

A PhD degree in a relevant discipline (although individuals who have almost completed a doctoral degree may be appointed). Consideration may also be given to individuals who do not hold a doctoral degree but have required skills based on a number of years experience in specified / relevant fields.

The post holder will have authority over some aspects of project work and must be capable of providing academic judgement, offering original and creative thoughts and be able to interpret and analyse results.

Relationships and Contacts

Direct responsibility to the principal investigator or academic supervisor. There may be additional reporting and liaison responsibilities to the external project partner. The post holder may work on original research tasks with colleagues in other institutions.

Special Requirements
N/A.

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.

Addendum to Profile

UNIVERSITY OF SURREY

Research Role Profile	
Job Title:	Research Fellow in Integrated Circuit Design

Job Summary and Purpose:

This information sheet in conjunction with the accompanying generic Academic Profile will be used for shortlisting processes.

The successful candidate will be required to have strong programming skills, circuit design, and extensive experience in electronic circuit design.

Main Responsibilities/Activities

- Circuit Design

- Contribute to the development of research platforms (FPGA/Microcontroller based) and testbeds and validate theoretical ideas through them

- Publish research outputs in top quartile journals and top international conferences in the field of communications systems.

- 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

- Plan and manage own research activity in collaboration with the members of the 5G Innovation Centre

- The post holder may occasionally be required to supervise more junior research staff.
- Carry out management and administrative tasks associated with specified research funding.
- Work jointly with the other researchers in the team to develop testbeds.

Research Role Profile

Person Specification
In addition to the criteria outlined in the accompanying generic Academic Profile, it is also essential, that the post holder must have: - Strong research and analytical skills   - Track record of publications in highly ranked journals and International conferences.   - Proficiency in Microcontroller programming.   - Proficiency in Analog/digital circuit design   - Proficiency in VHDL/FPGA   - Proficiency in Complex multi-layered PCB design   - Strong written and verbal communication skills with ability to write up project deliverables and give presentations on work completed.