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| **Job Title:** | Research Fellow (RA1) |

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| **Responsible to:** | Head of research group, or principal investigator |

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| **Responsible for:** | Responsibility for staff within own research group |

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| **Job Summary and Purpose** |
| To deliver research in accordance with the specified research project. |

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| **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.  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. |

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| **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. |

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| **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. The post holder will also supervise the activities of PhD students and technician staff within the particular research group |

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| **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.

# Addendum to Role Profile

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| Job Title: | Research Fellow (1A) |

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| Job Summary and Purpose: |
| This information sheet should be read in conjunction with the accompanying generic Research RA1A Role Profile and will be used for shortlisting processes. More specifically the post holder will be expected to:  The PDRA will contribute to the Interreg NW Europe Blockstart Programme focusing on  Distributed Ledger Technology (aka Blockchain). The role has two core components. i) to undertake new research exploring application of Blockchain technology to Federated Machine Learning; ii) to liaise with other Blockstart project members across disciplines to help advise external partners (e.g. SMEs) on technical matters pertaining to Blockchain. – in particular exploring how Blockchain can help address data privacy and trust issues through innovations in i) and otherwise. |

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| Main Responsibilities/Activities |
| To undertake a range of research activities within the project, assuming responsibility for specific areas of projects and making use of new research techniques and methods, in consultation with the investigators at the University of Surrey, the Blockstart Programme partners and SMEs. This will include the co-creation of solutions to develop/deploy Blockchain concepts within SMEs and develop use cases. The respective work will include:   * Actively participating in the dissemination of Blockchain knowledge and Blockstart findings and thereby contributing to the transnational ecosystem of Blockchain; * Contributing to the development of Blockchain solutions for the SMEs, making use of the University test bed if needed; * Using initiative and creativity to identify areas for research, develop new research methods and extend the research portfolio; * Analysing and interpreting results of own research; * Writing up results and preparing papers for submission to appropriate journals and conferences, and other outputs as required and/or appropriate; * Attending 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 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 assist with administrative tasks associated with the Blockstart Programme, for example: organisation of project meetings and assistance with documentation and reporting procedures. |

Person Specification

The post holder must have:

* Doctoral degree relating to distributed systems ideally related to distributed ledgers and Blockchain technology, or a related topic (or expected soon to hold such a degree)
* Experience developing distribution ledger technology (DLT) or Blockchain solutions
* Published at an international level in Machine Learning conferences, workshops or journals.
* Ability to communicate research results verbally, e.g. in presentations, to both technical and non-technical audiences, and to write up research for academic publication.
* Ability to interact successfully with non-experts in cross-disciplinary domains within the project team including partners in industry

The post holder may ideally also have:

* Experience novel machine learning or pattern recognition algorithms using deep neural networks.

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| Relationships and Contacts |
| Direct responsibility is to the principal investigator. The postholder will also work with the other investigators on the project at the University of Surrey, including Surrey Business School; with the Blockstart Programme partners, Brightlands, Windesheim University of Applied Sciences, Medicen Paris Region, Oost NL, Multitel, BioRegio STERN and Chainpoint; and with SMEs. The Programme will develop a transnational ecosystem with B  lockchain solution providers, technical and business support expertise and sector-SMEs as end-users, sharing case studies and success stories, and providing an invaluable and replicable SME-centric innovation model, leading to further opportunities to collaborate. |