UNIVERSITY OF SURREY

	Research Role Profile

Job Title:	Research Fellow A

Responsible to:	Head of research group, or principal investigator

Responsible for:	Not applicable

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 projects and making use of new research techniques and methods, in consultation with the research award holder or supervisor. This may include fieldwork, interviews, laboratory experimentation, critical evaluation and interpretation, computer-based data analysis and evaluation or library research.

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. 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.

To contribute to teaching in the Faculty by carrying out student supervision and/or demonstrating within the post holder's area of expertise and under the direct guidance of a member of departmental academic staff, as appropriate.

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

Person Specification

The post holder must have:

A doctoral 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. The post holder may be asked to serve on a relevant Faculty committee. There may be additional reporting and liaison responsibilities to external funding bodies or sponsors. The post holder may work on original research tasks with colleagues in other institutions.

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

The post holder must have:

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.

Summary of the project:

This post is part of a new five-year project "SignGPT" which will build tools to allow spoken language to be automatically translated into photo-realistic sign language and video of sign language to be translated into spoken language. This project is a collaboration between the University of Surrey (Prof Bowden), the University of Oxford (Prof Zisserman) and UCL (Prof Cormier and Woll). We are seeking two research fellows to undertake the core research within the project although they will also contribute to other related research projects within the group. Subject to skills we will be allocating one post to video translation and one to video production. The applicant should have a PhD in a related area with a strong track record of publishing high quality research. Previous experience of sign language recognition and translation would be advantageous would experience of supervising research. They should have good analytical and programming skills and experience of computer vision and machine learning. Previous experience of real time systems development in Python, OpenCV, PyTorch and deep learning are essential. Experience of C/C++/C#, TensorFlow would be beneficial. Applicants are expected to be proactive, to support other researchers and to be self-motivated. The post will be for 3 years in the first instance with possible extension.

More specifically the post holder will be expected to:

- Undertake research relevant to the project.
- Acquire new knowledge and skills as needed across both application areas cited above.
- Co-ordinate and prepare reports and deliverables for the project.
- Attend collaboration meetings.
- Supervise more junior staff and students
- Represent the University of Surrey and research related to the project, at such meetings and relevant conferences/workshops.

In addition to the criteria outlined in the accompanying generic Research B Role Profile, the post holder must have:

- Good communication and organisational skills
- Good programming skills Python & Pytorch essential, C/C++/C# desirable
- Experience of computer vision, machine learning and generative AI
- A track record of publishing high quality research

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- Previous experience of sign language, computation sign language recognition, production and translation would be advantageous