

Research Role Profile		
Job Title:	Research Assistant	
Responsible to:	Head of research group, or principal investigator	
Responsible for:	There is no direct supervisory responsibility	

## **Job Summary and Purpose:**

To support research activity in accordance with specified research project(s) under the supervision of the principal investigator

# Main Responsibilities/Activities

To support a research team by contributing to the planning of research projects and undertaking prescribed research tasks in accordance with specified research project(s), making use of standard research techniques and methods. These may include fieldwork, interviews, laboratory experimentation, computer-based data analysis or library research as directed by the research award holder and will entail co-ordinating own work with that of others to avoid conflict or duplication of effort. Analysing and interpreting results of own research, under the guidance of research award holder or supervisor. Write up results and contribute to the preparation of 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.

Continually update knowledge and develop skills

To carry out routine administrative tasks associated with a specified research project, for example risk assessment of research tasks, organisation of project meetings and documentation. This will entail planning own day-to-day research activity within the framework of the agreed programme, dealing with problems that may affect the achievement of research objectives and deadlines and implementing procedures required to ensure accurate and timely formal reporting and financial control

Demonstrating, or occasionally assisting with undergraduate supervision within the post holder's area of expertise and under the direct guidance of a member of the Faculty academic staff.



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## **Person Specification**

#### The post holder must have:

A first degree or a professional qualification or equivalent in a relevant subject.

At least part-completed a relevant doctoral degree or have relevant experience in a given field.

Whilst there is no requirement for previous work experience, the post holder will be expected to be able to support research activities by performing experiments and/or undertaking studies and analysing/ interpreting results.

#### **Relationships and Contacts**

Direct responsibility to the principal investigator or academic supervisor.

## **Special Requirements**

To be available to participate in work 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.



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#### Addendum

This document provides additional information relating to both specific aspects of the post/faculty and any post specific person specification criteria. The information contained within this document should always be read in conjunction with the accompanying generic Job Purpose.

Job Title:

Research Assistant in Computer Vision and Deep Learning

#### **Background Information/Relationships**

The work will involve the use of computer vision and machine learning for the identification, tracking and estimation of humans in video with specific application to the recognition of sign language. You will be assisting in data curation, processing and analysis. But there will be opportunities to contribute to other projects subject to skill set. Previous experience of sign language recognition, translation and linguistics are essential. Candidates should have good analytical and programming skills and some experience of computer vision and machine learning. Previous experience of real time systems development C/C++/C#, Python, OpenCV, PyTorch and deep learning would be advantageous.

## **Person Specification**

This section describes the sum total of knowledge, experience & competence required by the post holder that is necessary for standard acceptable performance in carrying out this role. This is in addition to the criteria contained within the accompanying generic Job Purpose.

Good communication and organisational skills	
Good programming skills C/C++/C#/Matlab/Python	
Solid working knowledge of Python and Linux	
Experience of computer vision and machine learning	
Ability to learn quickly	
Excellent problem-solving skills	
Previous experience of PyTorch, TensorFlow, OpenCV would be advantageous as would a working knowledge of sign language	D

#### **Key Responsibilities**

This document is not designed to be a list of all tasks undertaken but an outline record of any faculty/post specific responsibilities. This should be read in conjunction with those contained within the accompanying generic Job Purpose.

- 1. Assist the PI and members of the research group in data curation and processing.
- 2. Acquire new knowledge and skills as needed.
- 3. Contribute to reports and deliverables for projects.
- 4. Attend collaboration meetings.
- 5. Represent the University of Surrey and research related to the project, at such meetings and relevant conferences/workshops.

#### N.B. The above list is not exhaustive.



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