UNIVERSITY OF SURREY

Research Role Profile

Job Title:	Research Assistant in multimodal retrieval and language processing

Responsible to:	Prof Constantin Orasan

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 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.

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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.

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Background Information/Relationships
We are seeking a Graduate Researcher to join a multidisciplinary team working on a research project funded by eBay which aims to create a framework to support vision-language (V-L) research. The framework to be developed will be leveraging existing pre-trained vision-language models to improve the performance of matching listings with existing products, and for tasks like product listing moderation, attribute extraction, explained relevance prediction. This framework can later also serve as a testbed for customer support chatbots with image understanding and image-based product search. The appointed research is expected to be involved in the development and evaluation of the framework, and to contribute to the research publications produced in the project.

The postholder will be jointly supervised by Prof Constantin Orasan (CTS) and Dr Diptesh Kanojia (PAI) and it will require collaboration with researchers from eBay.

This is a fixed term contract up to end of March 2026, with the possibility of extension. |

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.

Qualifications and Professional Memberships	**Essential/ Desirable**
A research degree (MSc) in computer science or relevant subject	Essential
Technical Competencies (Experience and Knowledge) This section contains the level of competency required to carry out the role (please refer to the competency framework for clarification where needed and the Job Families Booklet).	**Essential/ Desirable**
Excellent programming skills	Essential
Experience with using large language models	Essential
Significant experience in natural language processing	Desirable
Experience with multimodal processing	Desirable

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Excellent written and verbal communication skills with an ability to write project deliverables and give presentations on the completed work	Essential

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. Identify and test existing pre-trained vision-language models in the context of the project
2. Contribute to the design and implementation of the framework developed in the project
3. Carry out extensive evaluation of the framework and prepare reports
4. Report research results at national and international scientific meetings
5. Attend meetings with researchers from eBay

N.B. The above list is not exhaustive.