

Research Role Profile

Job Title:	Research Officer/Research Assistant (1B)
-------------------	--

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
<p>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</p> <p>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</p> <p>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.</p>

Research Role Profile

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.

Research Role Profile

Addendum to Role Profile

Job Title:	Research Assistant (1B)
-------------------	-------------------------

Job Summary and Purpose:

This information sheet should be read in conjunction with the accompanying generic Research RA1B Role Profile and will be used for shortlisting processes. More specifically the post holder will be expected to:

The Department of Computer Science at the University of Surrey seeks to recruit a research assistant for a full-time position as soon as possible. The post is part of the Public Engagement with STEM Research project on Clinician-in-the-loop AI-assisted dental disease detection and the post holder will join the Nature-Inspired Computing and Engineering (NICE) group at Surrey. The post is fixed-term and full-time from 2nd May 2022 to 31st July 2022.

Dental radiography is an essential tool for diagnostics of dental diseases. Dental radiography interpretation is time-consuming and often error-prone due to a high variety of dental structures, positioning and orientation errors, and the substantial amount of radiographs that need to be analysed. An automatic solution for flagging abnormalities in dental radiography is needed to improve detection accuracy cost and reduce the economical and human costs. This project aims to develop a web-based radiograph annotation collection platform that integrates machine learning into the annotation process to streamline the process.

Main Responsibilities/Activities

The main responsibility of the post holder will be the development of trustworthy machine learning techniques to detect dental diseases based on crowdsourced dental radiographs. Specific duties include:

- Software/website implementation and validation;
- Write analytical reports detailing findings.

Additional duties:

- Act as a source of information and advice to other members of the group on scientific protocols and experimental techniques;
- Collaborate in the preparation of scientific reports and journal articles and occasionally present papers and posters;
- Carry out collaborative projects with colleagues in industry partners.

Person Specification

Research Role Profile

The post holder must have:

- Studying or have studied a relevant BSc/MSc (or be near completion) in the field of Computer Science;
- Experience as a full-stack web developer;
- Expertise and experience in software engineering;
- Ability to work well independently and as part of a team, as well as to possess interpersonal skills necessary to contribute effectively to a collaborative and interdisciplinary project;
- Excellent communication skills, including the ability to write for publication, present research proposals and results, and represent the research group at meetings.

Relationships and Contacts

Informal enquiries are welcome and should be directed to Dr Yunpeng Li,
yunpeng.li@surrey.ac.uk