UNIVERSITY OF SURREY

Research Role Profile

Job Title:	Research Fellow A

Responsible to:	Prof Josef Kittler

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.

Research Role Profile

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 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 from CVSSP and 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

Research Role Profile

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 Fellow (RAIA) in Face Recognition

Background Information/Relationships

The post holder will join the team of researchers working on an EPSRC funded research project in audio perception. The primary responsibility will be to conduct research in deep learning for audio classification, with a focus on self-supervised pretraining. The approach will involve adapting transformer-based image classification techniques to audio, represented by a 2D spectrogram. The main responsibility will be to develop architectures and algorithms for audio classification with enhance performance, as measured using benchmarking protocols datasets.

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.

	Essential/ Desirable
PhD in Machine Learning/Machine Perception or equivalent experience	E
Familiarity with deep learning, and good mathematical skills	E
Ability to work independently	E
Evidence of the ability to publish in high quality journals	E
Familiarity with benchmarking databases and evaluation protocols in audio classification	D
Understanding health and safety issues	E
Familiar with a variety of scripting tools	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 (5 to 8 maximum). This should be read in conjunction with those contained within the accompanying generic Job Purpose.

Research Role Profile

1. Design deep learning architectures for audio classification
2. Develop deep learning algorithms
3. Performa benchmarking experiments to evaluate the architectures and algorithms developed.
4. Produce a scientific report on the work carried out for publication in a high quality journal.
5. Contribute to research proposal writing and to outreach activities

N.B. The above list is not exhaustive.