

Job Title:	Research Fellow (1A)
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Responsible to:	Dr Enzo De Sena, Department of Music and Media
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Responsible for:	Not applicable
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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
<p>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.</p> <p>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.</p> <p>Continually to update knowledge and develop skills, and translate knowledge of advances in the area into research activity.</p> <p>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.</p> <p>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.</p> <p>The post holder may occasionally be required to supervise more junior research staff.</p>

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).

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.

Role Purpose 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 Role Profile.

Job Title:	Research Fellow/s in Immersive Audio
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Background Information/Relationships

Note: These posts will be offered on an a fixed-term contract for 36 months or until 28 February 2027 (whichever comes earlier).

We are recruiting two postdoctoral research associates who will work on a large-scale research programme on “Challenges in Immersive Audio Technology (CIAT)” conducted in collaboration between the University of Surrey, King’s College London, and the University of Southampton.

Find out more here [Find out more about the grant here](#)

There are 6 positions available, two at each institution. Candidates are encouraged to apply for multiple posts if they feel that their experience is well aligned with the positions.

About the Research Programme

Immersive technologies will transform not only how we communicate and experience entertainment, but also our experience of the physical world, from shops to museums, cars to classrooms. Despite significant progress in the computer vision community, long-standing fundamental challenges adversely impact on audio technologies, preventing immersion into realistic acoustic scenes in which the audience feels transported to an alternate reality. Specifically, state-of-the-art immersive audio technologies a) suffer from computational requirements preventing real-time creation of shared, interactive immersive audio experiences, and b) are limited in their ability to efficiently deliver shared, high-quality auditory experiences in 3D soundscapes to multiple listeners. CIAT’s vision is to transform the state of the art by developing a principled, scalable and reconfigurable framework for capturing and reproducing only perceptually relevant information.

We are seeking applications from highly motivated candidates postdoctoral research associate positions at our three partner institutions. Successful candidates will gain extensive opportunities for:

- Collaboration and networking between the three partner institutions and with external academic collaborators, stakeholders, and industry partners, including Stanford CCRMA (US), Kajima (Japan), BBC (UK), and SONOS (UK).

- Travel, including international conferences and workshops, as well as research visits at the partner institutions and Stanford CCRMA.
- Access to state-of-the-art research facilities and resources, e.g., the IoSR-hosted reference listening room, and the ISVR-hosted anechoic chamber.

Specifically, at the University of Surrey we are recruiting in the two areas detailed below:

Immersive Audio Reproduction

The work will be centred around the development of novel psychoacoustic-based technologies for immersive audio reproduction.

See Person specification which follows)

Perceptual Evaluations

The work will involve designing and executing subjective listening evaluations that will enable the development and optimisation of immersive audio technologies.

(See Person Specification which follows)

Person Specification (Immersive Audio Reproduction)	
<p>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 Role Profile.</p>	
	Essential/ Desirable
A PhD, or close to completion, in engineering, computer science or related area	E
Strong background in signal processing or acoustics	E
Track record in relevant areas of audio signal processing	E
Strong publication record or emerging	E
Ability to work well on own initiative and as part of a team	E
Ability to work flexibly and respond proactively to project deadlines	D
Track record of research in immersive audio reproduction	D
Experience in developing and implementing new immersive audio reproduction methods	D
Knowledge of AI/machine learning	D
Strong programming skills	D
Experience of presenting research findings to diverse audiences	D
Special Requirements	Essential/ Desirable
N/A	
Key Responsibilities	
<p>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 Role Profile.</p>	
<p>Developing immersive audio reproduction technologies relevant to the project. Liaising with other research fellows and project partners in the process of building, testing, and refining the technologies. Publish and disseminate your findings at top-tier journals and conferences in acoustics and signal processing. Contributing to the impact activities of the project. Working closely with the principal investigator to ensure that project deadlines are met. Attend project meetings and knowledge exchange events where required.</p>	
N.B. The above list is not exhaustive.	

Person Specification (Perceptual Evaluations)	
<p>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 Role Profile.</p>	
	Essential/ Desirable
A PhD, or close to completion, in engineering, computer science or related area	E
Strong background in acoustics and psychoacoustics	E
Track record in relevant areas of acoustics	E
Strong publication record or emerging	E
Ability to work well on own initiative and as part of a team	E
Ability to work flexibly and respond proactively to project deadlines	D
Track record of research in psychoacoustics and perceptual evaluations	D
Experience in designing and executing formal listening experiments	D
Strong programming skills	D
Experience of presenting research findings to diverse audiences	D
Special Requirements	Essential/ Desirable
N/A	
Key Responsibilities	
<p>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 Role Profile.</p>	
<p>Designing and executing formal listening experiments</p> <p>Liaising with other research fellows and project partners in the process of building, testing, and refining immersive audio technologies.</p> <p>Publish and disseminate your findings at top-tier journals and conferences in acoustics and signal processing.</p> <p>Contributing to the impact activities of the project.</p> <p>Working closely with the principal investigator to ensure that project deadlines are met.</p> <p>Attend project meetings and knowledge exchange events where required.</p>	
N.B. The above list is not exhaustive.	