Job Description: Assistant Professor in Scene Understanding and Smart Environments (HCI, Computer Vision, Robotics)

Post title and post number	Assistant Professor in Scene Understanding and Smart Environments (HCI, Computer Vision, Robotics) (Research and Education) – Post No. 80686
College/Budget Centre	EPS
School/Department	Computer Science
Full time/Part time	Full time
Duration of the Post	Open
Salary	Grade 8
Additional information	Informal enquiries can be made to each research group rep's email for each theme
Terms and Conditions	Academic Teaching and Research Staff
Closing Date	1st December 2024
Grade	8

Information for applicants

At the School of Computer Science at the University of Birmingham, UK, we seek to recruit talented computer scientists from diverse backgrounds for the role of Assistant or Associate Professor in Computer Science. Successful candidates will join a vibrant School, regarded as one of the best in the UK in academic research, societal impact and education. For this post, we welcome applications from enthusiastic academics in Scene Understanding and Smart Environments, which ranges from Human-Computer Interaction (HCI) to Computer Vision and Robotics.

Successful candidates will join in pursuing collaborative, challenge-led, research based on interdisciplinary research funding and in further improving diversity and inclusion in computer science research and education.

Academic Development Programme - new Assistant Professors will undertake a 5-year development programme, at the end of which they are expected to be promoted to Associate Professor. The programme consists of a variety of development opportunities and the time to reflect and develop.

Summary of Role

The School of Computer Science at the University of Birmingham is recruiting new academic staff to pursue its ambitions as one of the leading UK universities for computer science.

We seek to recruit in Human Computer Interaction (HCI), with a specific interest in mixed reality, computer vision, robotics and artificial intelligence. We are interested in using scene and user intention understanding for enabling better remote collaboration and more inclusive workspace. In this research, you will have the opportunity to work with academic across many subjects, including psychology, mechanical engineering, robotics and health. We particularly encourage applications from candidates who are enthusiastic about creating working systems and extending the state-of-the-art in any of the above-mentioned areas.

Computer Science at the University of Birmingham is one of the leading UK institutions for research and teaching in computer science. Our research is ranked 3rd across all UK universities according to the latest UK-wide Research Excellence Framework. Education is ranked 5th in the UK for computer science, according to 2024 tables. While pursuing excellence in research and education, we also aim to optimize our positive impact on society—examples include collaborations with industry partners and charities, commercialisation activities and an extensive wider participation programme. To support its aims, the School offers a vibrant, open and intellectually stimulating work environment in its dedicated computer science building, educating over 2000 students.

We value diversity and inclusion and welcome applications from all sections of the community and are open to discussions around all forms of flexible working. We support and mentor new staff through the Academic Development Programme, which provides a 5-year development programme, at the end of which staff are expected to be promoted to Associate Professor. The programme consists of a variety of development opportunities and the time to reflect and develop, provides mentoring, grant writing workshops/training and exposes you to colleagues across the disciplines and in our business and entrepreneurship units.

This post is for both Assistant Professor and Associate Professor level. Candidates should state which level they are applying for in the application.

Interested candidates are encouraged to make informal enquiries to Prof. Eyal Ofek e.ofek@bham.ac.uk. For general inquiries contact the Head of School – Prof. Aad van Moorsel a.vanmoorsel@bham.ac.uk.

When applying, candidates are **required** to upload:

- CV, which includes full citations, and identifies the candidate's selected 4 'best' publications in the last 5 years, with accessible URLs.

Candidates are strongly encouraged to upload the documents listed below to support their applications:

- Research Statement
- Teaching Statement
- Covering letter (optional, the candidate can choose to fill in the portal form instead)

- Links to code repositories or videos for examples of prior work on 3D applications (be it VR, AR or desktop 3D) is highly recommended

This advert will close on December 1, 2024. We follow a two-stage appointment process: early December, longlisted candidates will be invited to give an online, 20-minute research presentation, based on which shortlisting takes place. Shortlisted candidates will then be invited to visit the University of Birmingham (January), meet with staff members and students (if possible), and conduct a panel interview.

Main Duties / Responsibilities

Education
Using a variety of methods in teaching and advising individuals and groups of undergraduates, postgraduates, or short course students, including (as appropriate):
- teaching and examining courses at a range of levels;
- planning and reviewing your own teaching approaches and encouraging others to do the same;
- designing contemporary, inclusive, engaging and academically challenging curriculum content;
- working collaboratively with colleagues to design and deliver teaching, learning and assessment;
- using digital resources/environments effectively to support learning and assessment;
- developing programme proposals and making substantial contributions to the design of teaching programmes more widely;
- where appropriate, undertaking and developing the full range of responsibilities in relation to supervision, marking and examining;
- developing and advising others on learning and teaching tasks and methods;
- developing and making substantial contributions to knowledge transfer, enterprise, business engagement, public engagement activities or similar on own specialism that enhances the student experience or employability and which benefits the College and University;
- devising and supervising projects, student dissertations and practical work.

Research
Planning and carrying out research, including (as appropriate):
- planning and publishing high quality research, including winning financial support;
- project managing research activities, and/or supervising other research staff;
- presenting findings in publications and conference proceedings;
- effectively supervising and mentoring PhD students or early Career Researchers;
- providing expert advice to staff and students within the discipline;
- participating in research-related enabling activities such as adding value to a cross disciplinary network;
- applying knowledge in a way which develops new intellectual understanding;
- developing and making substantial contributions to knowledge transfer, and enterprise (including business engagement, public engagement) and similar activity that is of

benefit to the College and the University, including ensuring that the impact of your activities is realised fully and the impact is documented.

Management/Administration
Contributing to Departmental/School administration, including:
- contributing to the administration/management of research and/or teaching across the Department/School;
- leading and managing a team to devise and implement a new and/or revised process (e.g. new programme or a recruitment drive);
- advising on personal development of colleagues and students;
- making a major contribution to some administrative activities within the University (e.g. appeals panels, working groups);
- managing enterprise, business development, and public engagement activities;
- developing and making substantial contributions to knowledge transfer, enterprise, business engagement, public engagement, widening participation, schools outreach.
- actively manages equality, diversity and inclusion through monitoring and evaluation and actively challenging unacceptable behaviour.

Citizenship
Contributing to an inclusive working environment:
- demonstrating a willingness to be involved in a variety of activities supporting University life (e.g., participation in graduation, Departmental/School committees);
- demonstrating support for colleagues, such as sharing resources, providing advice;
- willingness to volunteer for one-off duties (such as supporting School, Institute, and Departmental projects);
- positively engaging in School strategic initiatives;
- proactive support and involvement in activities specifically contributing to a positive and inclusive community spirit across the School/College/University.

Person Specification
- Normally, a higher degree relevant to the research/teaching area (usually PhD) or equivalent qualifications
- Extensive research/teaching experience and scholarship within subject specialism
- Proven ability to devise, advise on and manage learning/research
- Skills in managing, motivating and mentoring others successfully at all levels

Teaching
- Ability to design, deliver, assess and revise teaching programmes
- Extensive experience and demonstrated success in developing appropriate approaches to learning and teaching, and advising colleagues
- Experience and success in knowledge transfer, enterprise and similar activity that enhances the student experience or employability

Research
- Experience and achievement reflected in a growing reputation
- Extensive experience and demonstrated success in planning, undertaking and project managing research to deliver high quality results
- Extensive experience of applying and/or developing and devising successful models, techniques and methods
- Experience and achievement in knowledge transfer, enterprise and similar activity

Management Administration
- Ability to contribute to School/Departmental management processes

- Ability to assess and organise resources effectively
- Understanding of and ability to contribute to broader management/administration processes
- Experience of championing Equality, Diversity and Inclusion in own work area
- Ability to monitor and evaluate the extent to which equality and diversity legislation, policies, procedures are applied
- Ability to identify issues with the potential to impact on protected groups and take appropriate action