UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Computer Vision for Multimodal Medical Imaging, Faculty of Engineering and Physical Sciences

Salary: Grade 7 (£39,355 – £46,735 p.a.) Due to funding restrictions, an appointment will not be made higher than £40,497 p.a.

Reference: EPSCP1170

Location: Leeds main campus

Closing date: Sunday 18 May 2025

Fixed-term until 31 March 2027

We are open to discussing flexible working arrangements

Research Fellow in Computer Vision for Multimodal Medical Imaging,
School of Computer Science.

Are you a researcher interested in developing cutting edge Artificial Intelligence systems for healthcare? Are you an aspiring researcher willing to contribute towards digital transformation of healthcare benefitting patients by integrating multimodal data for improving patient risk stratification and early cancer detection?

The project is aimed at understanding how multimodal data integration can improve the clinical outcome and help prognose inflammatory bowel disease stages for patient risk stratification. The selected candidate will work with endoscopic and whole-slide imaging (WSI) data. They will work on developing novel computer vision methods to improve decision making. The project will provide an opportunity to collaboratively work with computational scientists, pathologists and clinical experts exploring novel ways to transform research and practice in early cancer detection.

The project is initially intended to develop state-of-the-art methods separately on WSI and endoscopy and then combining these to explore the possibility of improving outcomes. These algorithms will then be used to develop a prognosis platform. You will investigate different approaches and find novel ways to improve the current limitations in this field.

You will be a leading researcher in Dr Sharib Ali's group focusing on computer vision methods for medicine and surgery. You will have the opportunity to collaborate with other academics and clinical team form Leeds Teaching Hospital NHS Trust to develop and test the system.

What does the role entail?

As a Research Fellow, your main duties will include:
- Fundamental understanding and knowledge in computer vision/medical image processing;
- Understanding and prior work experience in vision related problems;
- Generating and pursuing independent and original research ideas in the appropriate subject area;

- Developing research objectives and proposals and contributing to setting the direction of the research project and team including preparing proposals for funding in collaboration with colleagues;
- Evaluating methods and techniques used and results obtained by other researchers and to relate such evaluations appropriately to your own research;
- Making a significant contribution to the dissemination of research results by publication in leading peer-reviewed journals and by presentation at national and international meetings;
- Working independently and as part of a larger team of researchers, both internally and externally, to develop new research links and collaborations and engage in knowledge transfer activities where appropriate;
- Maintaining your own continuing professional development and acting as a mentor to less experienced colleagues as appropriate;
- Contributing to the training of both undergraduate and postgraduate students, including assisting with the supervision of projects in areas relevant to the project.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

What will you bring to the role?

As a Research Fellow, you will have:
- A PhD (or have submitted your thesis before taking up the role) in computer science, engineering or a closely allied discipline;
- A strong background in computer vision/medical image processing;
- Have some experience with Python/C++;
- Good time management and planning skills, with the ability to meet tight deadlines and manage competing demands effectively without close support;
- A developing track record of peer-reviewed publications in international journals;
- Excellent communication skills both written and verbal, and the ability to communicate your research at national and international conferences;
- A proven ability to work well both independently and in a team;
- A strong commitment to your own continuous professional development.
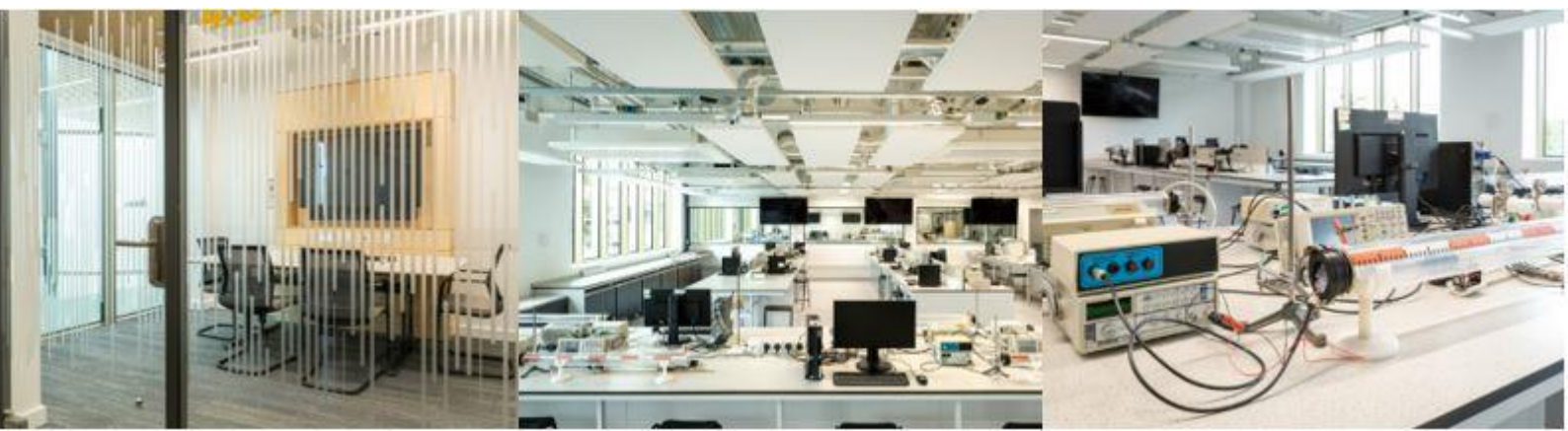
You may also have:
- Experience of pursuing external funding to support research;
- Have prior experience working with whole-slide images or endoscopic videos or multimodal data.

How to apply

You can apply for this role online; more guidance can be found on our [How to Apply](#) information page. Applications should be submitted by **23:59** (UK time) on the advertised [closing date](#).

Contact information

To explore the post further or for any queries you may have, please contact:

[Dr Sharib Ali](#), Lecturer (Assistant Professor)
Email: S.S.Ali@leeds.ac.uk

Additional information

Faculty and School Information
Further information is available on the research and teaching activities of the [Faculty of Engineering & Physical Sciences](#), and the [School of Computer Science](#).

Working at Leeds
We are a campus-based community and regular interaction with campus is an expectation of all roles in line with academic and service needs and the requirements of the role. We are also open to discussing flexible working arrangements. To find out more about the benefits of working at the University and what it is like to live and work in the Leeds area visit our [Working at Leeds](#) information page.

A diverse workforce
As an international research-intensive university, we welcome students and staff from all walks of life and from across the world. We foster an inclusive environment where all can flourish and prosper, and we are proud of our strong commitment to student education. Within the Faculty of Engineering and Physical Sciences we are dedicated to diversifying our community and we welcome the unique contributions that

individuals can bring, and particularly encourage applications from, but not limited to Black, Asian and ethnically diverse people; people who identify as LGBT+; and people with disabilities. Candidates will always be selected based on merit and ability.

The Faculty of Engineering and Physical Sciences are proud to have been awarded the Athena SWAN Silver Award from the Equality Challenge Unit, the national body that promotes equality in the higher education sector. Our equality and inclusion webpage provides more information.

Information for disabled candidates
Information for disabled candidates, impairments or health conditions, including requesting alternative formats, can be found under the 'Accessibility' heading on our How to Apply information page or by getting in touch by emailing HR via hr@leeds.ac.uk.

Criminal Record Information
Rehabilitation of Offenders Act 1974
A criminal record check is not required for this position. However, all applicants will be required to declare if they have any 'unspent' criminal offences, including those pending.

Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our Criminal Records information page.

Salary Requirements of the Skilled Worker Visa Route
Please note that this post may be suitable for sponsorship under the Skilled Worker visa route but first-time applicants might need to qualify for salary concessions. For more information, please visit the Government's Skilled Worker visa page.

For research and academic posts, we will consider eligibility under the Global Talent visa. For more information, please visit the Government's page, Apply for the Global Talent visa.