Job Title: Research Associate
Grade: 7
Salary: £39,355 per annum, pro-rata if part-time.
Department: School of Computing and Mathematical Sciences
Hours/Contract: Full-time or job share, fixed term contract to 30 September 2026
Reference: 11976

Role Purpose

To have specific responsibilities with an established research programme. To work collaboratively and independently as part of a research team to achieve defined milestones and produce high quality research as part of a wider programme.

Main Duties and Responsibilities

Research:

- To evaluate, refine and optimise AI models created as part of the initial SLAIDER project, taking responsibility for the planned research. Experience with scientific computing libraries and frameworks (e.g., NumPy, SciPy, TensorFlow, PyTorch) will be essential.

- To lead in the management and processing of the research data, experimental design and performance and work autonomously to attain project milestones. This will require close collaboration with the NHS East Midlands Secure Data Environment.

- To contribute to the refinement of AI modelling techniques, models and methods

- To contribute to the SLAIDER research programme using innovative research models, novel approaches and techniques.

- In agreement with the line manager, liaise with project collaborators to progress the research

- To lead in writing up research/technology findings for dissemination amongst the research team and broader international community, and develop ideas and contributions for future grants, technical outputs.

- To represent the research group by disseminating results/findings at national and international conferences and broader community.

- To contribute to the writing of research bids/grants.

- To provide guidance to other staff and students (involved in the research programme).

Professional Development

- To continuously engage in professional development, including subject knowledge and expertise as well as interpersonal skills.

- To attend mandatory training courses as required by the annual Personal Development Discussion.

Leadership and Citizenship

- To manage your own time day-to-day, as well as manage substantial computing resources on our High-Performance Computing cluster and the NHS East Midlands Secure Data Environment.

- To work effectively and constructively as a member of the project team, share outcomes of the work and submit outputs for internal review and testing

- To advise other members of the team when needed

- To engage in events and activities within the School and the University of Leicester more widely beyond the strict project work as appropriate

Internal and External Relationships

- Reporting to the project Principal Investigator, investigator team as well as the Head of School.
- Regular attendance at team meetings and preparation of work updates on a weekly basis.
- Working with other staff in an effective and collegial manner.
- Working with stakeholders, users and partners.

Planning and Organising

You will be required to manage your time effectively to plan your research and to deliver on the priorities of the project in a timely fashion. You will be responsible for managing available computing resources effectively to achieve the project aims and targets.

Qualifications, Knowledge and Experience

Essential

- A PhD or equivalent degree with strong relevant experience to this project*
- Experience of developing complex AI and machine learning models*
- A proven track record of implementing models in Python
- Knowledge and experience of GitHub or Gitlab for version control*

Desirable

- System integration skills involving computational models and AI
- Experience with writing software in Python for processing complex data sets
- Knowledge of clinical/healthcare data/informatics and related considerations
- General knowledge of health and social care policies

Skills, Abilities and Competencies

Essential

- Proven analytical and problem-solving capability
- Proven competency in developing machine learning, digital twins or AI models
- Strong programming skills in Python
- Ability to produce professional material for technical reports and documentation of your work

- Proficiency with Unix/Linux-based operating systems
- Excellent communication skills
- Ability to work effectively as part of a team
- Attention to detail

Criteria to be used in shortlisting candidates for interview

Reason for Fixed Term Contract

The reason for the fixed term contract is stated in section 1.9 in the summary of contractual terms in your contract of employment.

Criminal Declaration

If you become an employee, you must inform your manager immediately, in writing, if you are the subject of any current or future police investigations/legal proceedings, which could result in a criminal offence, conviction, caution, bind-over or charges, or warnings.

Supporting University Activities

As a University of Leicester citizen, you are expected to support key university activities such as clearing, graduation ceremonies, student registration and recruitment open days. We expect all staff as citizens to work flexibly across the University if required.

University Values

Inclusive - We are diverse in our makeup and united in ambition. Our diversity is our strength and makes our community stronger.

Inspiring - We are passionate about inspiring individuals to succeed and realise their ambitions. We challenge our community to think differently, to get involved, and to constantly embrace new ideas.

Impactful - As Citizens of Change we will generate new ideas which deliver impact and empower our community

Equity and Diversity

We believe that equity, diversity and inclusion is integral to a successful modern workplace. By developing and implementing policies and systems that challenge stereotypes across all aspects of our work, we have a culture that recognises and values the diverse contributions of our staff which benefits everyone. Our strong values of inclusivity and equity support our efforts to attract a diverse range of high quality staff and students, and identify our University as a progressive and innovative workplace that mainstreams equity, diversity and inclusion.