Research Associate in Digital Technologies
REQ200072

As part of the University's ongoing commitment to redeployment, please note that this vacancy may be withdrawn at any stage of the recruitment process if a suitable redeployee is identified.

We seek to employ an excellent Research Associate (RA) at the Institute for Digital Technologies on a fixed-term contract for 12 months. The RA should have an interest and track record in subjects such as digital signal and data processing, visualisation, machine learning and simulation. The RA will be expected to collaborate closely with the academics and industrial partners and take an active role in the delivery of a recently granted industrial research project. It is an excellent opportunity for potential candidates to be part of a dynamic team and take part in the continuous development of the Institute's research profile.

The industrial research project is supported by the Innovate UK grant as part of the 'Enabling data access in accountancy, insurance and legal services: CR&D' competition. The overall aim of the project is to develop a privacy-preserving data access network for regulated sectors in partnership with industry collaborators. As such, it aims to bring together data owners in diverse and isolated sectors, namely Legal, Accounting & Insurance (LAI) sectors, and make their valuable data confined in silos accessible for wider use in a trusted fashion. The successful candidate will be responsible for developing the data access network's intuitive data visualisation dashboard to present data owners in real-time what data is being accessed, by whom and under which commercial arrangement.

The project will require travelling to the project partners' sites from time to time for the success of the collaboration. The successful candidate will have a solid research background with a demonstrable track record preferably in the areas of digital signal and data processing and presentation and hold a relevant PhD degree in line with the required research areas. The successful candidate will be willing to use their knowledge and expertise in the respective fields in developing research ideas suitable for further funding and contribute to the postgraduate research supervision as appropriate.

Job Description

Job Grade
Specialist and Supporting Academic Grade 6

Job Purpose

To conduct research for designing and developing the necessary algorithms, software tools and APIs of the project's intuitive data visualisation dashboard. This will require knowledge of real-time multi-modal digital signal and data processing, fusion and visualisation, discrete event simulation, machine learning, and user interfaces. Knowledge and interest in AR/VR technologies applicable in data presentation are desirable.

Job Duties

- Managing the technical delivery of the work programme related to developing the project's intuitive data visualisation dashboard.
- Maintaining strong communication with the project investigators at LU London and in the overall project consortium.
- Ensuring that the work programme is progressing according to project milestones.
- Actively engaging in research related discussions with the academics of the Institute for Digital Technologies.

- Participating in and contributing to the regular research meetings of the Institute by delivering presentations.
- Authoring high-quality journal publications resulting from the original research conducted in the project, suitable for submission in the REF.
- Seeking appropriate funding opportunities for prospective research projects, especially focusing on the areas that will reinforce and extend the reputation of the Institute for Digital Technologies.
- Undertaking other duties as may be reasonably requested and that are commensurate with the nature and grade of the post.

Points to Note

The purpose of this job description is to indicate the general level of duties and responsibility of the post. The detailed duties may vary from time to time without changing the general character or level of responsibility entailed.

Special Conditions

All staff have a statutory responsibility to take reasonable care of themselves, others and the environment and to prevent harm by their acts or omissions. All staff are therefore required to adhere to the University's Health, Safety and Environmental Policy & Procedures.

All staff should hold a duty and commitment to observing the University's Equality & Diversity policy and procedures at all times. Duties must be carried out in accordance with relevant Equality & Diversity legislation and University policies/procedures.

Successful completion of probation will be dependent on attendance at the University's mandatory courses which include Respecting Diversity and, where appropriate, Recruitment and Selection.

Organisational Responsibility

Reports to the Institute for Digital Technologies based project investigators: Dr Safak Dogan and Prof Ahmet Kondoz.

Person Specification

Your application will be reviewed with respect to meeting the essential criteria listed below. Applicants are strongly advised to explicitly state and evidence how they meet each of the essential criteria in their application. Stages of assessment are as follows:

1 – Application
2 – Interview

Essential Criteria

Area	Criteria	Stage
Experience	Evidence of current research activity in the areas of interest consistent with the needs of Institute for Digital Technologies	1,2
	Experience of developing digital signal processing and data presentation algorithms for both real-time and off-line systems (desirable: knowledge in AR/VR capabilities for data visualisation)	1,2
	Track record of publications in line with their academic experience, including high quality refereed journals and conferences, in the areas closely related to the subjects of interest	1
	Experience of presenting research work at international conferences and/or other venues	1
Skills and abilities	Very good technical skills in programming with widely used tools (e.g., C/C++, Python, MATLAB, machine learning libraries) and hardware usage (e.g., data presentation, user interfaces)	1,2
	Ability to identify social / cultural / economic impacts from the research activity they engage with	2
	Ability to work under strict deadlines, proactively and independently	2
	Excellent written and oral communication skills	1,2
	Self-motivated with ability to meet deadlines	2
	Ability to work well with other researchers collaboratively both within the same organisation and other project partners	2
	Excellent analytical skills	1,2
	Ability to publish and review papers in journals and transactions of high quality	1,2
	Ability to present research work in national and international conferences	1
Training	Willingness to undertake appropriate further training and to adopt new procedures as and when required	1,2
Qualifications	A PhD degree in electrical/electronic engineering, computer science, telecommunications or an equivalent field that is closely related with the indicated areas of research	1
Other	Commitment to observing the University's Equal Opportunities policy at all times	1,2
	Willingness to travel and attend meetings related to the collaborative research project and other networking activities	1

Conditions of Service

The position is **full-time** and **fixed-term** for 12 months. Salary will be on Specialist and Supporting Academic Grade 6 (£30,942 - £40,322 per annum plus £3,204 London Allowance), at a starting salary commensurate with experience.

The appointment will be subject to the University's normal Terms and Conditions of Employment for Grade 6 and above staff, details of which can be found here.

The University is committed to enabling staff to maintain a healthy work-home balance and has a number of family-friendly policies which are available at http://www.lboro.ac.uk/services/hr/a-z/family-leave-policy-and-procedure---page.html.

Loughborough University London Staff are eligible to apply for an interest free season ticket loan and corporate gym membership.

In addition, the University is supportive, wherever possible, of flexible working arrangements.
We also strive to create a culture that supports equality and celebrates diversity throughout the campus. The University holds a Bronze Athena SWAN award which recognises the importance of support for women at all stages of their academic career. For further information on Athena SWAN see http://www.lboro.ac.uk/services/hr/athena-swan/