

Job Description




Technological University of the Shannon:
Midlands Midwest

Ollscoil Teicneolaíochta na Sionainne:
Lár Tíre Iarthar Láir

Postdoctoral Researcher in eXtended Reality

Vacancy ID	017341
Contract Type	Specific Purpose Contract – Expected Minimum Duration 24 Months
Location	Technological University of the Shannon: Midlands Midwest, Athlone campus
Reporting to	Principal Investigator
Competition Type	Open Competition
Introduction	<p>Technological University of the Shannon: Midlands Midwest is Ireland's third technological university and home to 14,000 students and a staff complement of approximately 2,000 people, full-time and part-time, across six campuses in Athlone, Limerick, Thurles, Clonmel, and Ennis.</p> <p>Established on October 1, 2021, TUS has a strong regional focus and will be a key driver of development and investment across the Midlands and Midwest. The new networked university, linked by the River Shannon, borders on almost half of Ireland's 26 counties and will provide unprecedented levels of access to higher education.</p> <p>We are committed to developing a contemporary and vibrant technological university - a higher education institute that reflects the educational and economic needs of our region and communities we serve. The new technological university will connect knowledge creation with industry partnerships to grow and support collaboration. The technological university will be the home of academic leaders, knowledge creators and cutting-edge researchers who will positively affect people's lives now and in the future.</p>
The Role	<p>TUS has a significant research track record eXtended Reality, Multisensory Multimedia and Quality of Experience within the Faculty of Engineering & Informatics in the midland's campus. The team now includes more than 20 MSc/PhD students in addition to postdoctoral researchers and Faculty from Dept. of Computer & Software Engineering. We are an interdisciplinary research team regularly collaborating with domain experts from health, education, tourism, smart manufacturing, cultural and creative sectors. Researchers in TUS play key roles in the Science Foundation Ireland Adapt Centre for AI enabled Digital Content Technologies, the Confirm Centre for Smart Manufacturing as well as the Enterprise Ireland COMAND Technology Gateway. In 2022, the team are coordinating the Horizon Europe project, TRANSMIXR: "Ignite the Immersive Media Sector by Enabling new Narrative Visions".</p>
Qualifications/ Experience	<p>Essential:</p> <p>Candidates must have:</p> <ul style="list-style-type: none">• PhD in Computer Science/Software Engineering/Communications Technology or equivalent experience (e.g. MSc by Research with related project experience)• Track record of dissemination of research outcomes in academic articles• Demonstrated understanding of operational requirements for a successful research project and managing resources• Knowledge and application of the principles underpinning successful grant application• Proven ability to identify and fulfil the academic writing requirements for target publications

	<ul style="list-style-type: none"> • Proven record of working with team members and PhD students to help build their research skill and knowledge and to support and guide their professional development • Generates new ideas and links and builds upon existing ideas to generate unique concepts and solutions. • Expertise in one <u>of key facets</u> of the project as outlined below*. <p>Desirable</p> <ul style="list-style-type: none"> • 2+ years postdoctoral research experience • Hands on design and development experience (incl. relevant programming languages) • Evidence of industrial engagement in research activities • Experience of planning, organising, and executing user studies • To demonstrate an ability to be an effective team player • Knowledge and experience in tech transfer and of the IP landscape • Experience in project costing and budget control • To demonstrate planning and organisational skills • Ability to work independently and self-manage • Excellent interpersonal and communication skills.
<p>Principal Duties and responsibilities</p>	<p>The postdoctoral researchers will join the TRANSMIXR team at TUS. TRANSMIXR is a newly funded Horizon Europe project, a consortium of 8 representatives from the creative and cultural sector and 12 leading industrial and academic partners, combines the necessary interdisciplinary skillsets and domain expertise to create a range of human-centric tools for remote content production and consumption via social virtual reality. The project's TransMIXR platform will provide (i) a distributed XR Creation Environment that supports remote collaboration practices, and (ii) XR Media Experience Environment for the delivery and consumption of highly evocative and highly-social immersive media experiences. The ground-breaking AI techniques for the understanding and processing of complex media content will enable the reuse of heterogeneous assets across immersive content delivery platforms. Using the Living Labs methodology, TransMIXR will develop and evaluate four pilots that bring the vision of future media experiences to life in three CCS domains: (i) news media & broadcasting, (ii) performing arts, and (iii) cultural heritage. The project will build on a track record of interdisciplinary research in the group developed for more than 10 years.</p> <p>We are looking for postdoctoral in the following areas:</p> <ul style="list-style-type: none"> • Human centred modelling and experience prediction (using AI techniques) of XR applications • Interaction Design and implementation for XR applications • XR for communication and collaboration <p>The candidates will contribute to the project in different parts, depending on the background, from the design and development of novel creation environments, to the implementation and deployment of advanced rendering pipelines for communication and collaboration, to the definition, modelling and prediction (using AI techniques) of adequate quality metrics.</p> <p>We expect candidates with proven knowledge on at least one of the following areas: *extended Reality technologies, human-computer interaction, tele-meetings and communications, AI/ML for modelling human behaviours; and with publications in relevant conferences (e.g., ACM CHI, ACM MMSys, QoMEX, IEEE VR) and journals.</p>
<p>Training Requirements</p>	<ul style="list-style-type: none"> • Induction training • Project management courses (desirable)
<p>Direct Reports</p>	<p>Research assistants or PhD students working in related area as designated by Principal Investigator</p>
<p>Hours</p>	<p>37 hours per week</p>

Annual Leave	23 days per annum
Salary	<p>SFI Salary Scale Level 2a salary scale, currently €42,032 - €48,427 (6 points).</p> <p>The rate of remuneration may be adjusted from time to time in line with Government pay policy.</p> <p>Also, the successful candidate will benefit from:</p> <ul style="list-style-type: none"> • On the job training (i.e. training specific to the job). • Employees after one year in employment can apply to the Professional Development Committee for funds for continued education. • Access to the Employment Assistance Programme • Discounted membership at AIT's gym which can be deducted monthly from employees' salary.
Contact Details	<p>For further information and informal enquiries about the position, please contact Dr Niall Murray, Senior Lecturer, Dept. Computer & Software Engineering: nmurray@research.ait.ie</p> <p>For all other enquiries The Human Resources Department Technological University of the Shannon: Midlands Midwest Email: hr@ait.ie (Midlands)</p>
Additional Information	<p>Technological University of the Shannon: Midlands Midwest may form a panel of candidates from this recruitment, for other research positions.</p> <p>In addition to the minimum qualifications, it may be necessary to introduce further shortlisting criteria. Therefore, candidates may be shortlisted based on qualifications and suitable experience, based on details given on the application form.</p> <p>We welcome applications from all suitably qualified individuals regardless of gender, civil status, family status, sexual orientation, religion, age, disability, race, or membership of the traveller community.</p> <p>TUS staff who wish to apply must apply via the ESS system. Only on-line e-recruitment application forms will be accepted.</p> <p>TUS is an equal opportunities employer, working towards creating and sustaining an inclusive environment which promotes equality, embraces diversity and is committed to work-life balance policies for all.</p> <p>Canvassing will disqualify</p> 
Personal Data	All personal data provided will be handled in accordance with the Data Protection Policy and Privacy Statements.