TITLE OF POST: Lecturer in Software Development and Software Systems Architecture

LOCATION: University of Limerick

REPORTS TO: Co-Directors ISE

CONTRACT TYPE: Specific Purpose

SALARY SCALE: €54,704 - €87,669 p.a. pro rata (maximum starting salary €70,246 p.a. pro rata)

JOB DESCRIPTION

QUALIFICATIONS:

- A doctoral degree (level 10 NFQ) in computer science, software engineering or closely related discipline.

OVERALL PURPOSE OF THE JOB:

Immersive Software Engineering will transform the research and education model of computer science. ISE is a four-year integrated BSc/MSc programme and a fully funded Research @ ISE programme (R@ISE). The post holder will join the growing ISE team in the CSIS department, invent new ways of teaching software engineering, and strengthen their research programme in software development and Software Systems Architecture. They will work with ISE's investing companies and other organisations to produce software development platforms, tools, and methods of tomorrow, and apply them in many industrial and societal contexts. The depth of involvement with our industry and investors ecosystem is unparalleled. Their relationships with ISE's companies will be supported by our Industry Coordinators.

The position is fully funded by philanthropic donations. The post holder will be expected to do research, shape the future of IT education, and teach in the integrated BSc/MSc program Immersive Software Engineering starting September 2022.

In addition, the post holder will work to further the Department's strategic objectives as well as participating in course delivery, management, and development.

Collaborative research and innovation will be welcome within the Department, UL and with the research centres Lero (the Science Foundation Ireland Research Centre for Software), Confirm (Centre for Smart Manufacturing), CRT-AI (the Science Foundation Ireland Centre of Research Training in AI) and the Healthcare Research Institute (HRI).

DESCRIPTION:

Essential Criteria

- A doctoral degree (level 10 NFQ) in computer science, software engineering or closely related discipline.
- A minimum of 2 years teaching experience and research activities with emphasis on software development and software systems architecture.
- Evidence of collaboration with industry and international partners.
- An active research and publication record in at least two of the following areas:
  - Software development techniques and paradigms.
  - Software and systems architectures.
  - Software systems and their verification.
  - Software and systems interoperability.
  - Model driven development.
  - Automation of software analysis and synthesis, generative approaches.

- Ability to apply software development and software architect to domain specific problems, spanning two or more of:
  - Programming and development frameworks for system evolution.
  - Modelling, reasoning, decision support systems.
  - Real time systems embedded and resource constrained systems.
  - Multiparadigm and multilanguage development systems.
  - Privacy, security, compliance, governance, digital forensics.
- Experience of outreach to industry, and to specialist and public audiences.

Desirable Criteria

- Experience of delivering studio-based education, block-based teaching, team-based teaching, and teaching in hybrid or virtual environments, or hybrid teaching using a VLE.
- Teaching experience across a range of computer science areas, including foundational topics.
- Experience of teaching both undergraduate and taught postgraduate students.
- Experience in module or course management and research management, including mentoring Master and PhD students.
- Experience of independent research and obtaining external funding.
- Some international recognition, e.g., in conferences, journals, professional associations, research initiatives or committees.

Applicants are required to include:

- A teaching plan (up to 1500 words in length) detailing how the candidate would organise and deliver intensive team-based education in the ISE context, in which blocks, and how this connects to their prior experience.
- Research and impact plan (up to 1500 words in length) describing how the candidate would contribute to the research that will be undertaken specifically within the context of the ISE program's unique industrial partnership network.

Note: Applications lacking the teaching or research and impact plan will be deemed incomplete and not further considered.