

Senior researcher in Modern Networking technologies

Munster Technological University Cork, which incorporates the Crawford College of Art and Design, Cork School of Music, and the National Maritime College of Ireland, invites applications from suitably qualified individuals for the position of Senior Researcher in the Department of Computer Science.

The successful candidate will work as part of the MoNet (Modern Networking technologies) research team. MoNet is a project that investigates networking technologies such as programmable data planes, in-network computing, network optimisation and verification, mmwave mesh, their challenges and their ability to address the increasing demand for high quality and low latency content. The MoNet project will develop a converged wired-wireless network testbed consisting of several network segments with programmable switches, CPE, and end devices, interconnected through a high-speed mmwave mesh backbone.

This is a full-time two years position hosted at the Cork Bishopstown campus of the Munster Technological University, Department of Computer Science. The successful candidate will report to Dr. Victor Cionca.

Duties and responsibilities

The main tasks of this position are to:

- build the MoNet testbed
- design and conduct experiments to measure the capabilities of the different testbed components as well as the end-to-end performance
- implement and test existing and novel solutions in the areas highlighted above
- develop or adapt software solutions for public timesharing of the testbed.

In addition the successful candidate is expected to

- contribute to dissemination of results (publications, workshops, seminars, etc) as primary organiser or contributor
- Help with the supervision/mentoring of future research students
- Contribute to the drafting of funding applications
- Interface with other research organisations or industry
- Participate in the design of the team's research strategy.

Qualifications, skills and experience required

Applicants are **required** to have the following

- A PhD and/or significant research experience (at least 6 years) in network operation, management and control, and the areas listed above
- Network planning, design, deployment, configuration and management
- Experience with network performance testing
- Software development skills: systems programming, scripting
- Good understanding of Software Defined Networking
- Good knowledge of the state of the art in modern networking
- Publications of academic papers in peer-reviewed journals and conferences.

Desirable:

- Development of Software Defined Networking applications and solutions for network control, using SDN controllers e.g. ONOS or ODL
- Programmable data planes e.g. P4
- mmwave networks
- Wireless mesh networks
- Network security
- Experience with networking hardware
- Experience writing funding applications.

Terms of appointment

The successful candidate is expected to commence before August 2023. The position is for two years.

Salary range

Starting salary in the range €50,365- €54,718 based on experience. Annual increments according to Munster Technological University researcher salary scale.

The interview process

If invited to the interview, applicants will be assessed at the interview under the following criteria:

- Experience in network design, and management
- Experience in network performance testing
- Knowledge of modern networking technologies
- Software development skills
- Research profile
- Desirable skills.

Closing time and dates

TBD

For informal queries contact Dr. Victor Cionca at victor.cionca@mtu.ie

This position is supported by Munster Technological University Transformation Fund.

MTU is an equal opportunities employer.