

Nimbus Research Centre

Two Positions:

- 1 x Researcher
- 1 x Senior Researcher

2 Year Fixed-Term Contract

Cork Institute of Technology, which incorporates the CIT Crawford College of Art and Design, CIT Cork School of Music, and the National Maritime College of Ireland, invites applications from suitably qualified persons for the position of Post-doctoral researcher based in the Nimbus Research Centre at Cork Institute of Technology.

The Nimbus Centre has over 40 researchers and is involved in an extensive range of applied research and innovation projects ranging from the embedded systems to cloud computing applications and services with applications in the Smart Cities, energy management, smart manufacturing, e-learning, infrastructure security, and assisted living and wellbeing. Nimbus works with partners across academia and industry in Ireland and across the globe. This is a very vibrant sector of the Irish technology economy and the Nimbus Centre's diversity of projects and multi-disciplinary team members reflect this. The Nimbus Centre is based in its own large purpose-built facility on the CIT campus with state-of-the-art research equipment to support its activities.

The Nimbus Centre is now seeking applications to fill two positions of Post-Doctoral Researcher for a two-year fixed-term period to conduct research in the application of **Distributed Ledger Technology (DLT) for data integrity and automating product release processes**. This is to support a project in collaboration with the SFI CONFIRM Centre for Smart Manufacturing and an industry partner.

Reporting to the Nimbus Confirm Investigator, the successful applicants will be responsible for:

Investigating the application of DLT and Smart Contracts to support the automation of quality control and product release processes in the manufacturing sector. The focus will be on reinforcing existing data integrity strategies to improve traceability and data collection procedures. This will include the design and development of a software solution aligned with current industry needs and leveraging state-of-the art digital technologies. The project will involve close collaboration and engagement with relevant stakeholders and the results will be demonstrated and validation against a use case scenario developed in conjunction with the industry partner.

The successful applicants for Post-doctoral Researcher will have:

Essential:

- a PhD and/or significant relevant research and innovation experience in academia or industry in the group's area;
- extensive scientific and/or technical knowledge of software development:
 - distributed architectures and computing
 - edge computing and secure integration

- data management and integrity strategies
- demonstratable experience in the design, modelling, and analysis of distributed software systems
- knowledge and experience with Blockchain and/or Distributed Ledger Technology platforms
- excellent project management, communication, public presentation, and report/paper writing skills;
- Fluent in spoken and written English.

Desirable:

- strong technical and/or scientific publication or consulting report portfolio; and
- experience in acquiring competitive research/innovation project funding;
- experience of smart contract development and deployment including software validation and distributed testing

The successful candidate will work with the CIT and broader CONFIRM Centre Team and access appropriate testbeds and equipment to support the research. They will contribute to the development of the research and innovation strategy in the smart manufacturing domain within the Centre.

Salary Range

Researcher: €36,302 - €44,248 per annum depending on qualifications & experience.

Senior Researcher: €42,260 - €52,403 per annum depending on qualifications & experience

For an informal discussion on the position, please contact Dr. Alan McGibney, e-mail: alan.mcgibney@cit.ie

This position is supported by funding from Science Foundation Ireland.

Applications by CIT eRecruitment system only. Applications will not be accepted in any other format. Please log on to www.cit.ie/vacancies for further details and to apply for these positions.

Closing date for receipt of completed eApplications is 1.00 pm on Tuesday, 22 September 2020.

NOTE:

In addition to the minimum qualifications, it may be necessary to introduce further shortlisting criteria.

Therefore, applicants may be shortlisted on the basis of qualifications and suitable experience, based on details given in the application form. Applicants should note that they may be called for more than one interview.

Cork Institute of Technology is an equal opportunities employer.

