





# IMaR Technology Gateway – R&D Engineer (Research Assistant), Mechatronics

The IMaR Technology Gateway in the Institute of Technology, Tralee is part of the Enterprise Ireland Technology Gateway Network, a nationwide resource providing innovation support and near-to-market technology solutions for industry and commercial enterprises.

The principal theme of IMaR is the synergy between mechanical, electronic, RFID and IIoT technologies for industrial / commercial applications. Research activities involve the development and integration of mechatronic and embedded systems, sensors, automation and robotics, instrumentation, Industrial Internet of Things (IIoT), and developing complete software solutions for intelligent systems including data/process analytics and artificial intelligence.

The overall mission of IMaR is to be industries partner of choice for the provision of innovative applied research and training, to support and deliver new product and business development and optimisation or enhancement of existing products and services. IMaR serves a broad spectrum of industries including Automotive, Heavy Engineering, Telecommunications, Pharmaceutical, Logistics, Production / Manufacturing, Environmental, The Marine, Healthcare and Agri-business.

The IMaR Technology Gateway is closely affiliated to the IMaR Research Centre and the AgriTech Centre of Excellence (ACE) and has access to the skills and expertise of over 40 full-time research professionals, expanding the Gateways' capabilities to autonomous vehicle technologies, augmented and virtual reality systems and engineering modelling and simulation.

The IMaR Research Centre will be a part of the Munster Technological University (MTU) when the MTU is established on the 1st of January 2021. The MTU will be a multi-campus technological university, contributing to the region through the provision of academic programmes that support student development and opportunities, education and research. Partnering with industry and community, MTU will invest in the future with state-of-the-art research, education, enterprise, cultural and sports facilities. MTU will have an extensive regional footprint with six campuses across the South-West region in Cork and Kerry.

#### **Position**

We are looking for a highly motivated and creative engineer to work within a team of mechanical and electronic engineers in the development of near-to-market technology solutions for our clients. The successful candidate will work on projects relating to mechanical and electronic engineering, manufacturing and process automation and will:

- Be responsible for delivering hardware prototypes to IMaR client organisations,
- Communicate with clients in relation to project scope and technical requirements,
- Create and maintain project and technical documentation,
- Work collaboratively with other team members.

The successful candidate will have experience in mechatronic technologies and/or embedded systems, PCB layout, sensors, automation and/or robotics and instrumentation and related software systems. The role is particularly suited to candidates who favour challenging and diverse projects which it will greatly enhance the individuals research experience and capabilities.







## **Qualifications and Experience**

Applicants are required to have a minimum of a bachelor's degree in Electronic, Mechatronic or Control Engineering / Applied Physics or another engineering / science degree with relevant experience.

Candidates must demonstrate the following:

- Experience with electronic and mechanical hardware design and fabrication.
- Working knowledge of manufacturing processes & instrumentation.
- Working knowledge of CAD design packages, PCB layout and schematic capture.
- Familiarity with DIY projects that involve electronics, microcontrollers, programming & machine intelligence.
- Good organizational skills and an ability to manage resources.

The following skills / attributes are desirable:

- Familiarity with technologies in the area of Industrial Internet of Things and manufacturing systems
- Familiarity with embedded real time OS, IoT communication networks (LoRa, Sigfox, NB-IoT)
- A zeal to progress product ideas / technical concepts to prototype/final products
- Self-motivated, reliable with an ability to take ownership of technical problems.
- A strong interest in emerging technologies.
- A strong motivation to develop a personal research profile and to contribute to the ongoing success of the IMaR Technology Gateway and IMaR Research Centre.

#### **Duration of Contract**

This position is initially for a fixed-term 12 month contract.

### Salary

A salary of up to € 34,930 will apply to this post, dependant on the candidates experience and qualifications.

### **Application Procedure**

All applications must be made online at www.ittralee.ie

#### Location

This post is located at the Institute of Technology Tralee and involves regular visits to industrial partners in the region and academic partners nationally and internationally. Tralee is situated in the South West of Ireland in County Kerry – an area world-famous for its natural beauty and quality of life and the location of many high-tech indigenous and multi-national organisations.

### **Informal Enquiries**

Informal enquiries ONLY may be addressed to Prof. Joseph Walsh, email: <a href="mailto:joseph.walsh@staff.ittralee.ie">joseph.walsh@staff.ittralee.ie</a>

Closing date for applications is noon Wednesday 6<sup>th</sup> January 2021

Applications received after the closing date will not be accepted.