

Postdoc/Research Fellow (Software)

The Institute of Technology Tralee has established a world-class research centre in the area of Intelligent Mechatronics and Radio-frequency identification (RFID) i.e. The Intelligent Mechatronics and RFID Centre [The IMaR Centre].

The principal theme of the IMaR Centre is the synergy between mechatronics and RFID for industrial applications in the highly technological manufacturing industry driven by new technology, innovation and global demand. Mechatronics is a multidisciplinary field of engineering that includes a combination of mechanical engineering, electrical engineering, control engineering and computer engineering. Radio-frequency identification (RFID) is the wireless non-contact use of radio-frequency electromagnetic fields to transfer data, for the purposes of automatically identifying and tracking tags attached to objects.

The centre is core funded by Enterprise Ireland and houses state-of-the-art research facilities. The overall mission of the IMaR Centre is to be industries partner of choice for the provision of innovative applied research. The IMaR Centre will serve a cross section of industries including Automotive, Telecommunications, Pharmaceutical, Production / Manufacturing, Aeronautical, Environmental, healthcare and Agri-business.

IT Tralee/IMaR is also a member of the **Lero - Irish Software Research Centre**, one of Lero's strategic goals is to work with industry partners to identify and solve industry problems, generating new SW-based products & services thus ensuring that Lero's research is firmly connected to the real world.

Position

We are looking for a highly motivated, Research Fellow to join the research team at IMaR. The successful candidate will collaboratively work and contribute to an on-going research project with one of our industrial partners.

Minimum Qualifications

- Master's degree in Science or Engineering or equivalent.

Requirements

We are particularly seeking a person who possess the following attributes:

- Have a minimum of 4 years (post-graduation) C# development experience
- Exposure to modern development technologies, frameworks & patterns
- Experience and the discipline of working within a fast-paced test driven environment
- Write maintainable code, refactors as you go, and minimizes technical debt
- Proven ability to deliver software on-time
- Experience working with ES5 & ES6, TypeScript a plus

- Good knowledge of Angular (1 & 4)
- Plenty of experience building non-trivial SPAs
- Strong CSS (and CSS preprocessor) and HTML
- Confident working SCM tools and branching strategies in git
- Experience working with DI containers, understanding of Inversion of Control patterns
- Experience in designing and implementation of RESTful & SOAP API's
- Experience with Amazon Web Services
- Big Data processing, SQL and non-SQL databases (MySQL, DynamoDB, Hadoop)
- Develop analytics to provide meaningful insight into animal health and performance data.
- Mathematical analysis and algorithm development for sensor data analysis
- Time series analysis and pattern identification
- Data mining
- Mathematical modelling of scientific problems.

Desirable Skills/Experience:

- Excellent knowledge of Agriculture and especially Dairying.
- Excellent knowledge of statistical analysis and software programs such as Mathcad/Octave/R or equivalent
- Be imaginative and persistent and have the ability to communicate clearly.
- Be logical and technically minded and possesses strong problem-solving skills
- Excellent interpersonal, teamwork and communication skills (both verbal and written).
- Strong C# .Net knowledge.
- Minimum 3-4 years of .NET/ASP Development, Web Services.
- Knowledge of Web Technologies (HTML, jQuery, AJAX, CSS, WS-Security etc).
- Strong object-oriented design and coding skills. Experience working in Microsoft's Visual Studio 2010 Professional Edition Environment.
- Experience in using source code control management systems - commercial or open source.
- Ability to work on own initiative, in a fast paced environment with attention to detail.
- Excellent analytical and problem solving skills, an ability to understand complex problems and generate appropriate pragmatic technical solutions.
- Experience with MS SQL Server 2005/2008. Exposure to Agile Development Methodologies.
- Proven ability to analyse technical software development/design issues and manage them to resolution.
- Constantly promote awareness of best industry practices, providing company training as required.
- Energetic and eager to learn and implement new technologies when required.
- Focused on keeping your knowledge up to date.
- Asp.Net MVC 3.
- Testing.
- HTML5 / JQuery or Sencha (Ext.js).
- Database design and performance optimization.
- Experience with Microsoft Windows Azure or Amazon Web Services.



The ideal candidate will also possess the following attributes:

- Knowledge of programming tools such as C/C++ or VisualBasic and advantage
- Proven ability to take ownership of development projects.
- Self-motivated and able to work on own initiative, with excellent organisational and personal management skills.
- Professional and mature attitude to work with energy, drive and enthusiasm - to be a proactive member of the team.

Duration of Contract

2 years

Salary

An attractive salary will apply to this post, dependant on employee experience and qualifications.

Application Procedure

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

Informal Enquiries

Informal enquiries ONLY may be addressed to Prof. Joseph Walsh, email: joseph.walsh@staff.ittralee.ie

Closing date for applications is 12.00 noon on Tuesday 30th June 2020

Applications received after the closing date will not be accepted

