Researcher in Full Stack Development

Farm ZEro C is an SFI-funded collaboration between industry and academia aimed at addressing SFI's Zero Emissions Challenge. Farm ZEro C aims to deliver a range of sustainable strategies which collectively can help to create a more sustainable and resilient dairy sector. The ultimate aim of the project is to develop a replicable net zero emissions model for dairy farmers. Farm ZEro C strategies include sustainable land management practices, deployment of bioeconomy and renewable energy technologies, anti-methanogenic dietary additives and improving and increasing farm natural habitats. Building on these strategies, Farm ZEro C will develop a business plan in the form of a social innovation blueprint which can be replicated among farmers to support a wider adoption of Farm ZEro C strategies throughout the agricultural sector. The innovation blueprint (business model) will be digitalised in the form of a web platform containing key commercial links, case studies, scientific reports, and other trust-worthy resources that will inform the farmer of how climate mitigation strategies have and can be implemented on farms and the results that they have obtained.

The Farm ZEro C team is led by SFI BiObic Centre and Carbery Group, with partners including University College Dublin, Munster Technological University Kerry, Trinity College Dublin, Teagasc and GRASSA B.V.

Munster Technological University is currently recruiting a Researcher in Full Stack Development or related discipline to join the Farm ZEro C team. This is an excellent opportunity for an early stage researcher to become involved in a high impact, multi-disciplinary project.

Working with the MTU and Farm ZEro C team, the researcher will be responsible for the digitalization of an Innovation Blueprint (IB) - business plan - that will evaluate and elaborate the business cases underpinning the different Farm ZEro C emission abatement strategies before integrating these within a social innovation blueprint which can be adopted across the dairy and wider agricultural sector. The digitalisation of the blueprint will be through an intuitive interactive web platform to support education of the farmers in navigating, understanding and implementing the IB. The platform will be multi-tenant, optimised for computer, and smartphone and integrated with a Climate Neutral App.

At MTU the project is led by the Circular Bioeconomy Research Group (CircBio) at Shannon ABC and the IMaR Research Centre. This position is based within the IMaR Research Centre. IMaR has approximately 40 full-time researchers working across several disciplines including RFID, data analytics, software development, automation, autonomous systems and machine learning.

Position

The researcher will develop techniques to collect primary and secondary content required to supplement economic projections of strategies presented by a Social Innovation Blueprint. The researcher will work closely with the Agricultural Economics research team to develop an accessible online platform. They will support team members across other relevant tasks and work packages.

Qualifications and experience:

The ideal candidate will have a minimum post-graduate degree or undergraduate degree with industrial experience in a relevant field, such as web technologies, computer science, or related discipline. The candidate should also have direct project or work experience designing and developing complex websites.

Candidates must demonstrate the following:

- ✓ A Degree or postgraduate degree in a related area is essential
- ✓ Minimum of 2 years experience as a full stack JavaScript developer
- ✓ Proficiency and experience in JavaScript (e.g. React, Node, Angular, JQuery)
- ✓ Experience in designing Web APIs
- ✓ Strong SQL and cloud storage skills
- ✓ A broad understanding of all aspects of software development
- ✓ Excellent analytical, project management and report writing skills
- ✓ Excellent interpersonal, communication, presentation and organizational skills
- ✓ Immediate start is essential

The following is desirable

- ✓ Experience with Agile development processes
- ✓ Knowledge of secure coding best practices
- ✓ High level of initiative
- ✓ High level of attention to detail
- ✓ Excellent problem solving skills
- ✓ Experience participating in collaborative research projects
- ✓ Experience in design and exploitation of social innovation initiatives
- ✓ Knowledge in monitoring, reporting and verification
- ✓ Full driving license

Salary

This post is full time 18-24 months' duration, with a salary of €37,028.

Application Procedure

All applications to be made online at www.mtu.ie/vacancies
Position is contingent on successful completion of project Grant Agreement

Location

This post is based within the IMaR Research Group located at the Munster Technological University in Tralee however, occasional national visits will be essential to collaborate with industrial and academic partners.

Informal Enquiries

Informal enquiries ONLY to Dr. Pat Doody, email pat.doody@staff.ittralee.ie

Closing Date for applications is 1pm on Tuesday 20th July 2021

Applications received after this date will not be accepted.