



Senior Applications Engineer – Wireless Sensor Networks

JB-09 Senior Applications Engineer

Contract : Full Time/Fixed Term (12 months)

The [Wireless Sensor Network Group](#) at the Tyndall National Institute, University College Cork is currently advertising for the position of Senior Applications Engineer – Wireless Sensor Networks

The Tyndall National Institute, at University College, Cork is a world leader in the development of smart sensor systems for use in the body, on the body and around the body. Working closely with a global range of academic, business and clinical partners, our technology is under evaluation by several multinational corporations and is approaching market readiness in a number of areas.

As a result of funding secured under significant commercial and government investment, the Wireless Sensor Network Group, Tyndall National Institute - University College Cork, invites applications for an appointment as a **Senior Applications Engineer to implement research-focused platforms in the area of Wearable WSN for Connected Health and Wellness monitoring**.

Reporting to the WSN Head of Group or his nominee, this is an exciting opportunity to help define and implement applied research projects in a variety of fast-moving, industrially relevant areas. Working with the Wireless Sensor Network (WSN) Head of Group and industry applied research team, the successful candidate will be part of a team of multi-disciplinary industry aligned researchers with expertise in microsystems technology, wireless sensors, electronics and low-power system hardware and software design to execute industry defined applied research projects. The team comprises of engineers, researchers and postgraduate students with various levels of experience and qualifications.

Activities will include applied research implementation, hardware/software co-design of embedded systems, and travel to international conferences, workshops, industry meetings, proposal project meetings, to strategically position Tyndall WSN as a world-leading industry-focused applied research group.

Key Responsibilities

- To conduct and lead a specified programme of research in embedded systems under the direction of the Principal Investigator/Project Leader.
- Development of embedded wireless systems solutions as part of applied research projects.
- Enhance Tyndall's position internationally as a world leader in wireless sensing systems.
- Work with Tyndall's industry/research partners (existing and planned) to identify their wireless sensing needs (technologies and applications).
- The candidate will be required to lead and implement applied industrial projects in the system specification, design and deployment of embedded wireless sensing systems.
- To provide assistance in conducting the following research activities, including planning, organising, conducting, and communicating research studies within the overall scope of the applied research project.

- To coordinate and perform a variety of independent and team activities involved in the collection, analysis, documentation and interpretation of information/results.
- To undertake tasks which may include recording results and preparing reports, including conclusions and recommendations. Application of qualitative and quantitative research techniques to establish fish health.
- To engage in appropriate training and professional development opportunities as required by the Principal Investigator, School or College in order to develop research skills and competencies.
- To carry out administrative work to support the program of research and ensure all project deliverables and milestones are achieved in a timely manner.
- To provide guidance as required to any support staff and/or research students assisting with the research project, as agreed with the Principal Investigator/Grant holder.
- To disseminate project outputs, through the interpretation of results and the preparation of manuscripts for publication, including where appropriate public engagement and outreach activities.
- Participate in Education and Public Engagement activities, as required.
- Ensure all activities are compliant with the Tyndall Quality Management system.
- Ensure all activities are compliant with the required Health and Safety standards.
- Carry out any additional duties as may reasonably be required within the general scope and level of the post.

Essential Criteria

- A post-graduate (Masters) degree in Computer Science, Electrical and Electronic Engineering, or equivalent research experience
- Typically 5 years' experience in embedded systems PCB design and Firmware development
- A proven ability to independently take on projects and carry them out from initial requirements to final preproduction prototype
- Experience with sensor development, integration and test
- Experience with lab-equipment
- Proven project management skills including scheduling, budgeting and delivery
- A demonstrated capability in the delivery of applied research projects
- Capability of effectively leading and working within a team to achieve results
- Excellent communication skills.
- Good analytical and computer skills relevant to embedded systems

Desirable Criteria

- Industrial or mechanical design capabilities and a knowledge of Design for Manufacturing practices
- Experience in embedded wireless systems hardware and software design and development
- Experience in standards-based wireless and embedded system protocols
- Experience in standard sensor interface protocols
- Experience in the typical tradeoffs involved in developing sensor systems for multiple application domains is an asset.
- High levels of initiative, self-management, achievement-orientation, and motivation are encouraged.

Appointment may be made on the Grade 6 Admin III Scale (B) €50,042 - €59,746. Salary placement on appointment will be in accordance with public sector pay policy.

Informal enquiries can be made in confidence to John Barton at john.barton@tyndall.ie.

Application Instructions

Step 1 - Click [here](#) to download and complete the Application form and indicate JB-09 as the Job Reference

Step 2 – Return completed Application form, together with your CV and motivation letter to careers@tyndall.ie.

Handwritten forms will not be accepted.

A full candidate information pack is available to download by clicking [here](#).

Please note that Garda vetting and/or an international police clearance check may form part of the selection process.

The University, at its discretion, may undertake to make an additional appointment(s) from this competition following the conclusion of the process.

Please note that an appointment to posts advertised will be dependent on University approval, together with the terms of the employment control framework for the higher education sector.

At this time, Tyndall National Institute does not require the assistance of recruitment agencies.

Tyndall National Institute at University College, Cork is an Equal Opportunities Employer.