



**Postdoctoral Researcher/Research Fellow in Signal Processing**  
**Electrical and Electronic Engineering**  
**College of Engineering & Informatics**  
**NUI Galway**  
**Ref. No. NUIG 089-17**

Applications are invited from suitably qualified candidates for a full-time, fixed term (18 month) position as a Postdoctoral Researcher or Research Fellow (commensurate with qualifications and experience) in Electrical & Electronic Engineering at NUI Galway.

The position is funded by a Horizon 2020 Research and Innovation project titled "ADAS&ME" (<http://www.adasandme.com>) which aims to develop and trial technology for managing the interface between humans and vehicles in the context of development of autonomous and semi-autonomous cars. The position is available from July 1<sup>st</sup> 2017.

The post-holder will contribute to the development and prototyping of a radar-based sensor for non-contact monitoring of vehicle occupants. The radar sensor will be used as part of a larger system used to monitor the overall state of the person, e.g. fatigued, anxious, stressed etc. The post-holder will support the development and validation of algorithms and software for processing of radar signals in order to extract physiological measures of interest.

The successful candidate will be based in the Electrical & Electronic Engineering discipline at NUI Galway, and will work as an integral part of an international consortium of around 30 organisations across Europe, including industry, academic, research institutes and user group partners.

**Job Description:** The postholder will be responsible for the development of signal processing algorithms for processing radar signals in order to extract physiological signals of interest, and will work with partners on prototyping and testing the system. The successful candidate will be expected to take responsibility for meeting appropriate milestones, timelines and deliverables as part of the overall ADAS&ME project.

**Duties and Responsibilities:**

- Develop signal processing algorithms for non-contact driver monitoring applications;
- Support industry partners on embedded system design, in particular on software development;
- Contribute to prototype development and system integration;
- Actively participate in international conferences and meetings as required;
- Publish in high-impact journals as appropriate;
- Participate in consortium meetings and workshops as appropriate, including travel to other countries within Europe;
- Provide support and mentoring to post-graduate research students in the host research group;
- Engage in appropriate continuing professional development activities to support their own career development plans.

**Essential Requirements:**

- An honours BE degree or equivalent in Electrical/Electronic/Computer Engineering, or in Biomedical Engineering with significant electronics/software background.
- A PhD, or equivalent experience\*\* in a relevant research environment.
- Significant experience in the development of signal processing algorithms and embedded software.

- Knowledge of Matlab or other signal processing development tools.
- Evidence of primary/senior authorship of peer-reviewed publications in relevant areas, or other equivalent output e.g. patents.
- Excellent written and spoken English communication skills.

\*\* Minimum 4 years' experience instead of a PhD for appointment at Postdoctoral Researcher level. Minimum 6 years' experience instead of a PhD for appointment at Research Fellow level.

**Desirable Skills:**

- Experience in algorithm development in biomedical or related applications.
- Expertise in issues relating to medical device regulation.
- Knowledge or experience of radar or other wireless-based remote monitoring systems.

Appointment will be made at either Postdoctoral Researcher or Research Fellow level, commensurate with qualifications and experience.

**Salary:** €37,750 to €46,255 per annum – Postdoctoral Researcher.

€51,716 per annum – Research Fellow.

**Start Date:** The position is available from 1st July 2017.

**Continuing Professional Development/Training:**

Researchers at NUI Galway are encouraged to avail of a range of training and development opportunities designed to support their personal career development plans.

Further information on research and working at NUI Galway is available on [Research at NUI Galway](#)

For information on moving to Ireland please see [www.euraxess.ie](http://www.euraxess.ie)

Informal enquiries concerning the post may be made to Dr Martin Glavin ([martin.glavin@nuigalway.ie](mailto:martin.glavin@nuigalway.ie)).

**Applications:** Candidates are requested to submit a cover letter, CV (Word or PDF format only) and the names and addresses of three referees via e-mail to Dr Martin Glavin ([martin.glavin@nuigalway.ie](mailto:martin.glavin@nuigalway.ie))

*Please ensure to put the reference number **NUIG-089-17** in subject line of e-mail application.*

**The closing date for receipt of applications is 5pm on 31st May 2017.**

All positions are recruited in line with Open, Transparent, Merit (OTM) and Competency based recruitment.

National University of Ireland, Galway is an equal opportunity employer.

