



PhD Scholarship Advertisement

Fully Funded PhD in Wireless Implantable Sensing Systems at Smart Sensors Lab

School of Medicine, College of Medicine, Nursing and Health Sciences, University of Galway

Application(s) are invited from suitably qualified candidates for full-time funded PhD scholarship(s) starting in June, 2023 affiliated to the School of Medicine at the University of Galway.

University of Galway

Located in the vibrant cultural city of Galway in the west of Ireland, the University of Galway has a distinguished reputation for teaching and [research excellence](#)

For information on moving to Ireland please see www.euraxess.ie

Detailed Project Description: The PhD project will focus on the development of a wearable device to measure blood pressure from a wireless implantable sensor for patients with hypertension. Hypertension is considered a major cause of death from cardiovascular disease. Accurate monitoring of blood pressure results in better control of blood pressure, which can significantly reduce the risk of death due to hypertension. The development of an accurate blood pressure sensor and a wearable reader device is required for reliable blood pressure measurement for clinical use. The PhD research will address the critical challenges of sensor linkage with the external wearable device, extension in detectable range, and miniaturisation of the reader device. This will require the development of an embedded system on a flexible PCB and sensor data processing algorithms to meet the design requirements of the wearable reader device.

Living allowance (Stipend): €18,500 per annum, [tax-exempt scholarship award]

University fees: €5,500

Start date: June 2023

Academic Entry Requirements: Applicants should ideally possess a Masters degree or a BS(hon) or BE with relevant experience in Electronic/Computer Engineering or a closely related discipline with a strong background in analogue/digital electronics, RF front-end design, analogue/digital IC design, and microprocessor/FPGA-based embedded systems. Additional requirements include:



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UNIVERSITY OF GALWAY



HR EXCELLENCE IN RESEARCH

- Experience in Verilog/ VHDL, Python, and C coding.
- Knowledge/experience of integrated circuit design, simulation, and verification analysis and familiarity with related software (e.g., Cadence Virtuoso System Design, Cadence Analog (RF) etc.)
- Problem-solving, critical thinking and troubleshooting skills
- Excellent written and oral communication skills.

To Apply for the Scholarship: The PhD position is supported by the Horizon RIA grant

Contact Name: Dr Riaz Rehman

Contact Email: riaz.rehman@universityofgalway.ie

Application Deadline: 03/05/2023 and time 17:00 GMT





- *To advertise **on findaphd.com** please select subject areas from the list below.*
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FindaPhD Disciplines & Subject areas

Agriculture

- agricultural sciences
- agricultural technology
- arable farming
- livestock farming
- forestry & arboriculture
- other

Anthropology

- biological anthropology
- social anthropology
- other

Architecture, Building & Planning

- architecture
- built environment
- construction management
- landscape architecture
- rural planning
- surveying
- urban planning
- other

Biological Sciences

- bacteriology
- behavioural biology
- biochemistry
- biodiversity
- bioinformatics
- biophysics
- biotechnology
- cancer biology
- cell biology
- developmental biology





- ecology
- ecotoxicology
- entomology
- environmental biology
- evolution
- genetic engineering
- genetics
- genomics
- human genetics
- immunology
- marine biology
- microbiology
- molecular biology
- molecular genetics
- neuroscience
- parasitology
- plant biology
- plant cell biology
- reproductive biology
- structural biology
- systematic biology
- virology
- zoology
- other

Chemistry

- analytical chemistry
- applied chemistry
- computational chemistry
- environmental chemistry
- industrial chemistry
- inorganic chemistry
- organic chemistry
- petrochemical chemistry
- pharmaceutical chemistry
- physical chemistry
- polymer chemistry
- structural chemistry





- synthetic chemistry
- other

Communication & Media Studies

- broadcast media
- digital media
- journalism
- print media
- production
- public relations
- publishing
- other

Computer Science

- artificial intelligence
- computer architectures
- computer vision
- computer graphics
- cyber security
- data science
- human computer interaction
- internet of things
- machine learning
- networks
- quantum computing
- software engineering
- videogames
- other

Creative Arts & Design

- animation
- art
- crafts
- creative writing
- dance
- design
- drama
- fashion
- film studies





- fine art
- graphic design
- interior design
- music
- music technology
- photography
- theatre studies
- other

Economics

- econometrics
- financial economics
- macroeconomics
- microeconomics
- political economics
- other

Education

- further education
- higher education
- nursery education
- primary education
- secondary education
- special needs education
- other

Engineering

- acoustics engineering
- aerospace engineering
- atomic engineering
- automotive engineering
- bioengineering
- biomedical engineering
- chemical engineering
- civil engineering
- communications engineering
- control systems
- cybernetics
- dynamics





- electrical engineering
- electronic engineering
- energy technologies
- environmental engineering
- fluid mechanics
- gas engineering
- geotechnical engineering
- integrated engineering
- manufacturing engineering
- marine engineering
- mechanical engineering
- mechanics
- mechatronics
- nanotechnology
- offshore engineering
- petroleum engineering
- robotics
- solid mechanics
- structural engineering
- structural mechanics
- systems engineering
- thermodynamics
- other

Environmental Sciences

- climate science
- hydrology
- marine sciences
- meteorology
- pollution
- soil science
- other

Finance

- actuarial science
- banking
- financial management
- insurance
- investment





- taxation
- other

Food Sciences

- food hygiene
- food production
- other

Forensic and Archaeological Sciences

- archaeological science
- forensic science
- other

Geography

- agricultural geography
- cultural geography
- economic geography
- environmental geography
- geographical information systems gis
- historical geography
- human geography
- marine geography
- physical geography
- political geography
- remote sensing
- social geography
- transport geography
- urban geography
- other

Geology

- applied geology
- geochemistry
- geophysics
- geoscience
- geotechnology
- hydrogeology
- marine geology
- palaeontology





- seismology
- volcanology
- other

History & Archaeology

- african history
- american history
- ancient history
- archaeology
- asian history
- australasian history
- british and irish history
- economic history
- european history
- heritage studies
- history
- history of art
- history of religions
- history of science
- medieval history
- military history
- modern history
- russian history
- social history
- world history
- other

Information Services

- information security
- information systems
- librarianship
- other

Languages, Literature & Culture

- african studies
- american studies
- asian studies
- australasian studies
- chinese





- danish
- dutch
- english language
- english literature
- european studies
- finnish
- french
- german
- italian
- japanese
- middle eastern studies
- norwegian
- portuguese
- russian
- spanish
- swedish
- other

Law

- criminal law
- commercial law
- contract law
- property law
- other

Linguistics & Classics

- ancient greek
- celtic studies
- classics
- latin
- linguistics
- other

Materials Science

- ceramics
- glass
- metallurgy
- polymers
- textiles



other

Mathematics

- applied mathematics
- applied statistics
- computational mathematics
- data analysis
- engineering mathematics
- mathematical modelling
- medical statistics
- operational research
- probability
- pure mathematics
- statistics
- stochastic processes
- other

Medicine

- anatomy
- audiology
- biomechanics
- cardiology
- complementary medicine
- dentistry
- endocrinology
- epidemiology
- neural engineering
- neurology
- nutrition
- ophthalmology
- optometry
- pathology
- pharmacology
- pharmacy
- physiology
- physiotherapy
- podiatry
- radiology
- speech science





- tissue engineering
- toxicology
- other

Nursing & Health

- adult nursing
- community nursing
- counselling
- dental nursing
- environmental health
- health informatics
- medical nursing
- mental health nursing
- midwifery
- occupational health
- occupational therapy
- paediatric nursing
- paramedical science
- surgical nursing
- other

Philosophy

- ethics
- metaphysics
- philosophy of science
- other

Physics

- acoustics
- astronomy
- astrophysics
- chemical physics
- computational physics
- electromagnetism
- environmental physics
- experimental physics
- medical physics
- nuclear physics
- optical physics





- particle physics
- quantum mechanics
- solid state physics
- space science
- theoretical physics
- other

Politics & Government

- development studies
- government
- international relations
- politics
- public policy
- other

Psychology

- child psychology
- clinical psychology
- community psychology
- counselling psychology
- developmental psychology
- educational psychology
- forensic psychology
- health psychology
- neuropsychology
- occupational psychology
- organisational psychology
- psychotherapy
- sport psychology
- other

Sociology

- criminology
- disability studies
- gender studies
- socio economics
- social work
- other





Sport & Exercise Science

- sport coaching
- sport development
- sport performance
- sport technology
- sport therapy
- other

Theology & Religious Studies

- divinity
- religious studies
- theology
- other

Veterinary Sciences

- animal welfare
- veterinary dentistry
- veterinary medicine
- veterinary nursing
- veterinary nutrition
- veterinary pathology
- other

