PHD GRANT IN ARTIFICIAL INTELLIGENCE FOR ULTRASOUND MEDICAL IMAGING

Company Description

The University of Deusto invites applications for several PhD projects to be performed in DeustoTech. Deusto Institute of Technology -DeustoTech- http://deustotech.deusto.es/ locate in Bilbao (Spain), is a Research Institute of the Faculty of Engineering at the University of Deusto, and was created with the mission of promoting research and postgraduate training in Information Technology and Communications (ICT) through the participation in research projects of interest to society and industry. DeustoTech is looking for promising young researchers in the areas such as Data Science, Biomedical Engineering and Computer Vision. The positions are directed to master graduates and they are intended to offer three years fellowships. Research Topics: PhD grants are offered to be performed in the following research topic belonging to the newly opened Quantitative Decisions in Healthcare research line https://deustotech.deusto.es/r in association with Deustek/Morelab https://morelab.deusto.es, a high performance research team recognized by the Basque University System. Topic #PC1: Artificial Intelligence for Ultrasound Medical Imaging: Life expectancy is continuously increasing, and to promote healthy and active ageing, which guarantees an improved quality of life for older adults, is essential. Ultrasound is a portable, hazard-free and cost-effective

Information

- Deadline: 2021-08-29
- Country: Basque Country
- Category: Academia
- City: Bilbao
- Province: Bizkaia

Company

Universidad de Deusto

Main functions, requisites & benefits

Main functions

The successful candidates will use modern machine learning techniques to extract and exploit the wealth of information about tissue mechanics and microstructure, which is contained in the time signals captured by the ultrasound probe (several GBs of data per acquisition). For this purpose, they will combine traditional quantitative features extracted with tissue biomechanical models with self-learned features directly extracted from the data. They will also support technology deployment and data acquisition in clinical studies. Spin-off opportunities for newly developed technology are available. For further information: Sergio Sanabria sergio.sanabria@deusto.es

Requisites

Candidates must be eligible according to the 2021-2022 Basque Government PreDoc Grants call. Call summary in Spanish: https://sites.google.com/deusto.es/es-fpi-gv/nuevas-ayudas Call summary in Basque: https://sites.google.com/deusto.es/eus-fpi-gv/laguntza-berriak Candidates must have been registered (empadronados) in a municipality of the Basque Country (Comunidad Autónoma Vasca – CAPV) before January 1st 2021 on. Non-Spanish nationals must have their work permit in order to apply to this call. Candidates should have a Degree in Computer Engineering, Biomedical Engineering, Telecommunications Engineering or Electronic Engineering (other equivalent disciplines will be also considered). An appropriate Degree at Masters Level will be mandatory in order to access the PhD Program (applicants finishing a Master's degree along this academic year will also be considered, minimum 300 ECTS credits with 60 credits at Master Level). Fluency in spoken and written English is desired; knowledge of Spanish is not a requirement. Preferred skills include background or strong interest in medical imaging and data science, and programming experience in Python or Matlab. To be eligible, candidates must become a full-time worker at DeustoTech facilities. All qualified candidates will be considered.

Benefits

The grants will have a duration of 48 months, with annual renewals. Each 12 months the performance of the Doctoral Student will be evaluated to check if they achieve the PhD research goals established for the period. The exact amounts awarded will be established by the University of Deusto. In the currently open call, the annual gross salary is 16,599€ for the first year.