

RESEARCH STAFF - POST DOCTORAL RESEARCHER IN APPLIED MATHEMATICS, CHAIR OF

Company Description

The University of
Deusto was founded in 1886 by the
Society of Jesus. With campuses in
Bilbao and San Sebastian and
branches in Vitoria and Madrid, its
hallmarks are education in skills
and values, thanks to its own
socially recognised teaching
model. It is also characterised by its
specialist research,
its commitment to
justice and international outreach.

Information

Deadline: 2025-01-07
Category: Academia

Province: Bizkaja

Company

Universidad de Deusto



Main functions, requisites & benefits

Main functions

General call for Grants allocated to research projects or groups to pursue Post Doctoral Position: RESEARCH GROUP, Chair of Computational Mathematics, DeustoTech, at the University of Deusto. The University of Deusto in the ERC Advanced Grant CoDeFeL project framework invites applications for one (01) open postdoctoral research position at the ERC CoDeFeL, Control for Deep and Federated Learning project. Purpose of the Position: DeustoTech - Deusto Institute of Technology is the Technological Research Center of the University of Deusto, located on the Bilbao campus, whose mission is to promote research, training and knowledge transfer at the service of society and industry. Within DeustoTech, the Chair of Computational Mathematics, is dedicated to advancing research, training, and outreach in various aspects of Applied Mathematics. Our team works actively in the broad area of Applied Mathematics and Machine Learning, developing and applying methods of Mathematical and Computational Mathematics to model, understand, design and control the dynamics of various phenomena arising in the interface of Mathematics with Engineering, Physics, Environment and Climate Sciences and Social Sciences. In particular, CoDeFeL seeks to make a breakthrough that takes the mathematical foundations of Machine Learning beyond their present frontiers, through the systematic development of new ideas and methods inspired by control theory. The project is developed by the "Chair for Dynamics, Control, Machine Learning, and Numerics -Alexander von Humboldt Professorship in cooperation with the Chair of Computational Mathematics of the University of Deusto in Bilbao, Basque Country, Spain, led by Enrique Zuazua. The successful candidate will work at the forefront of new mathematical challenges working on the development of new tools with a solid mathematical foundation suitable for data-aware/physics-inspired modelling, combining machine learning and control theoretical ideas, motivated by significant applications in health care, autonomous driving and internet recommendation systems. Title of the project to be incorporated: ERC CoDeFeL, Control for Deep and Federated Learning project . PI and/or Project Manager: Professor Enrique Zuazua. Endowment of the Contract: Initially limited to up to three (3) years. The remuneration will depend on the candidates' experience and qualifications, which will be evaluated objectively based on scientific criteria. Funding Entity: European Research Council (ERC), Functions: We are looking for a Post Doctoral Researcher specialized in high level experience in Control mathematics and Machine Learning and proven experience in Partial Differential Equations and Numerical Analysis as well as computational skills to develop computational codes. The candidate is expected to be able to structure and address the research challenges of the ERC CoDeFeL project and collaborate and work effectively with internal and external teams within the project framework. Depending on experience, the candidate should be able to work both independently and collaboratively in an international and interdisciplinary environment, and, where applicable, supervise research assistants in the activities that he/she leads. Furthermore, the candidate will be involved in mentoring undergraduate and graduate students, publishing research findings in scientific journals, presenting them at national and international conferences, and supporting the research team with the technical reporting and results dissemination from the CODEFEL project.

Requisites