PHD IN APPLIED MATHEMATICS

Company Description

The University of Deusto aims to serve society through a specifically university-oriented contribution. This entails full dedication to students and society through the deepening of knowledge, its transfer, the formation of values, and professional development.

Information

- Deadline: 2025-05-26
- Category: Academia
- Province: Bizkaia
- Country: Spain
- City: Bilbao

Company

Universidad de Deusto

Deusto

Main functions, requisites & benefits

Main functions

General call for Grants allocated to research projects or groups to pursue Doctoral Studies. Research Group, Chair of Computational Mathematics, DeustoTech, at the University of Deusto. University of Deusto in the ERC Advanced Grant CoDeFeL project framework invites applications for one (01) open doctoral research position at the ERC CoDeFeL, Control for Deep and Federated Learning project[1]. The Chair of Computational Mathematics at University of Deusto (Bilbao, Basque Country, Spain), 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 (FAU DCN-AvH) in cooperation with the University of Deusto in Bilbao (https://cmc.deusto.eus), Basque Country, Spain led by Enrique Zuazua. Functions: We are looking for a doctoral researcher specialized in Control and/or mathematics and /or Machine Learning and knowledge in Partial Differential Equations and Numerical Analysis as well as computational skills to develop computational coding. 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. Title of the project to be incorporated: ERC CoDeFeL, Control for Deep and Federated Learning project GA 101096251 PI and/or project manager: Prof Enrique Zuazua Funding Entity: European Research Council (ERC) Institutional values: University of Deusto is committed to international standards, transparent performance agreements, equal opportunity, inclusivity, support for under-represented groups, an inclusive culture, and diversity. The University of Deusto in Bilbao (Spain) reserves the right for justified reasons to leave the positions open, to extend the application period. [1] The CoDeFeL project (ERC-2022-ADG) has received funding from the European Union's Horizon ERC Grants programme under grant agreement No. 101096251.

Requisites

Qualifications required: Hold a degree and master in Applied Mathematics and/or Machine Learning. Be enrolled or admitted at a University of Deusto doctoral programme Have advanced knowledge in scientific programming (R, Python, Matlab) Excellent knowledge of English (oral/written) is compulsory to the job profile and tasks development.

Benefits