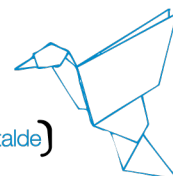# BCAM Internship: The mathematics of machine learning: minimax approaches for supervised classification

The following BCAM Internship position is open at BCAM – Basque Center for Applied Mathematics, an interdisciplinary research center located in Bilbao, Basque Country – Spain.

The interested applicants can apply via the following webpage: https://joboffers.bcamath.org/

INTERNSHIP OFFER	
Research topic:	The mathematics of machine learning: minimax approaches for supervised classification
Research line:	Machine Learning (ML)
Research topic description:	This internship can be a unique opportunity to have a first point of contact with research on mathematics and machine learning. In addition, the internship can also serve to carry out the master or bachelor thesis project. The student will learn the main mathematics behind machine learning and artificial intelligence techniques. In addition, the intern will develop and implement new mathematical methods for a recently proposed approach for supervised learning based on minimax methods. The internship will consist on both theoretical and practical aspects and the student will both prove new theorems and implement new algorithms using real datasets.
Keywords:	Machine learning, Matlab, Linear algebra, Probability, Statistics, Functional analysis
Supervisor:	Santiago Mazuelas
Required knowledge and skills:	Degree (completed or near to be finished) in Mathematics, or a related field
Duration and dates:	3 months; from 1st March to 1st August (flexible depending on the intern circumstances)
Conditions:	• **Living in the Basque Country:** - Graduate students: net salary of 300 € monthly - Master´s degree students/ PhD students: net salary of 350 € monthly • **Living in Spain:** - Graduate students: net salary of 500 € monthly + 150 €

	for travel expenses
	- Master´s degree students/ PhD students: net salary of 600 € monthly + 150 € expenses for travel.
	
	• **Living outside Spain:**
	-No remuneration.
	-Accommodation is covered by BCAM.
	-Diets to be reimbursed up to 250€.
	-Travel expenses are covered and to be reimbursed:
	    ○ Up to 300 €, if the intern comes from the EU
	    ○ Up to 1000 €, if the intern comes from outside of the EU (to be checked on each country)

Application deadline:	April 15th, 2025