

BCAM Internship Position Announcement

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: http://www.bcamath.org/en/research/internships. It is strongly recommended to apply at least 3 months before the expected starting date.

INTERNSHIP DATA		
Research topic title:	Minimax supervised classification	
Research topic description:	Supervised classification can be approached as a zero- sum game between learner and nature. Efficient algorithms can be enabled by using uncertainty sets of distributions defined by a generating function. This project will develop techniques that utilize general loss functions	
Keywords:	supervised classification, statistics, probability	
Required knowledge and skills:	Statistics/probability, Linear algebra, optimization, Programming in Matlab or python	
Required language skills1:	Spanish or English	
Duration and dates:	3 months; flexible dates depending student availabilit	
Covered expenses:	Accommodation (if necessary)	
Application deadline:	1 st July 2021	

SUPERVISOR DATA		
Supervisor:	Example: Santiago Mazuelas	
Research line:	Example: Machine Learning	
Email:	Example: smazuelas@bcamath.org	

(matematika mugaz bestalde)

 $^{^{1}\,}$ Note that English is the official language at BCAM.



Request for BCAM Internship: 1st Phase

This form signed by the Supervisor and by PIs of the funding projects must be handed in to the Administrative Coordinator of the BCAM Internship program well before the application deadline (it is recommended to do so at least 2 months in advance), together with the document titled "BCAM Internship Position Announcement", which will be published on the BCAM internship webpage.

Please, note that BERC funding will be assigned to internship positions according to BCAM development priorities and additional requirements may exist.

INTERNSHIP DATA				
Research topic title:	Minimax supervised classification			
Additional research training:	The applicant will learn how to develop learning algorithms for supervised classification and to compare performance of different classification algorithms			
Expected outcomes, deliverables and contributions:	Χ	Part of bachelor/master/PhD thesis of the Applicant AND the Supervisor WILL BE a formal (co-)advisor		
		Part of bachelor/master/PhD thesis of the Applicant BUT the Supervisor WILL NOT BE a formal (co-)advisor		
		Video		
	Χ	Code / Software		
	Contribution to computational wiki			
		Patent application		
	Χ	Short paper (e.g. conference proceedings, book of abstracts)		
	Χ	Long paper (e.g. journal, competitive conference)		
		Other (specify)		

SUPERVISOR DATA		
Supervisor:	Santiago Mazuelas	
Email:	smazuelas@bcamath.org	
Secondary Supervisor (if needed):		
Email:		



FUNDING DATA					
Concept	Amount	Funding source	Signature of PI		
Insurance*:	~ 40€/month	RyC			
Accommodation:	To be negotiated	RyC			
Travel costs:	To be negotiated	RyC			
Monthly remuneration:	To be negotiated	RyC			

^{*} If the Applicant has no Social Security coverage

Date:	Example: 01/09/2012
Signature of the Supervisor:	
Signature of the Secondary	
Supervisor (if needed):	