




Company
Description

BCAM is the Research Center on Applied Mathematics created with the support of the Basque Government and the University of the Basque Country, which aims to strengthen the Basque science and technology system, by performing interdisciplinary research in the frontiers of mathematics, talented scientists' training and attraction, so the excellence of our results are recognized by the Society

Information

 Deadline: 2023-04-14
 Category: Business
 Province: Bizkaia

 Country: Basque Country
 City: Bilbao

Company

BCAM



Main functions, requisites & benefits

Main functions

The project's goal is to research and develop novel statistical machine learning and inference methods for predictive and prescriptive tasks that overcome the challenges posed by applied settings (e.g., non-stationary and missing not-at-random phenomena), combining probabilistic models, deep learning, stochastic processes and approximate inference. The candidate will work under the supervision of Ikerbasque Research Fellow Iñigo Urteaga, and will benefit from close collaboration with members of the Machine Learning group at BCAM and external collaborators at Columbia University. The core of the research is on the design and implementation of novel machine learning solutions within the following research challenges: 1. How to disentangle data missingness patterns from time-varying signals of interest via statistical machine learning models. 2. How to devise data-driven, automated sequential decision making algorithms in dynamic and multi-scale prescriptive environments. The candidate will investigate both the theoretical and practical aspects of statistical machine learning, with potential assessment of how the devised methods perform in healthcare applications.

Requisites

Master's degree in Computer Science, Statistics (or a related field), or be close to its completion. Applicants must have an excellent academic record. Skills: Background and experience in machine learning and statistics. A track record in quality research, as evidenced by publications in scientific journals and conferences of the field. Self-motivated, independent researcher with scientific curiosity and honesty. Demonstrated ability to work independently and as part of a collaborative research team. Good interpersonal skills, with ability to present and publish research outcomes in spoken and written form. Fluency in spoken and written English. The preferred candidate will have: Familiarity with statistical modeling, machine learning and approximate inference. Expertise with generative modeling, stochastic processes and approximate inference. Familiarity with reinforcement learning concepts, if interested in working on the design of sequential decision algorithms. Solid programming skills in Python, experience with PyTorch/JAX would be ideal.

Benefits

Contract: 1 year The gross annual salary of the Fellowship will be 18.450€-28.000€ It will then be on your own responsibility to make your yearly income declaration at the Bizkaia Treasury Agency. Additionally, we offer a moving allowance up to 1.000€. Should the researcher have a family at the time of recruitment: 1. 1.000€ gross in a single payment will be offered (you must be married-official register or with children and the certificate to prove it must be sent). 2. 600€ gross per year/per child (up to 2 children) will be offered (the certificate to prove it must be sent). Free access to the Public Health System in Spain is provided to all employees