**Research Technician in Machine Learning for Materials Simulation and Cancer Research**

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<th><strong>Job Offer</strong></th>
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<td><strong>Topics:</strong> The Basque Center for Applied Mathematics - BCAM, is looking for a Research Technician position in Machine Learning for modelling battery materials and drug resistance in cancer treatment to join Modelling and Simulation in Life and Materials Sciences (MSLMS) group, and work under the supervision of Dr. Elena Akhmatskaya, Dr. Mauricio Rincón Bonilla, and Dr. Henry Andrés Cortés. We are offering a unique opportunity for a motivated individual to join the Basque Center for Applied Mathematics (BCAM) as a Research Technician. This position involves working in Machine learning (ML), that has emerged as a transformative tool in scientific research, revolutionizing both fundamental and applied studies. Its ability to process vast amounts of data and identify patterns has led to significant advancements in various fields, witnessing an unprecedented wave of ML applications across different domains. In our research, we aim to harness ML and data-driven methods to accelerate progress in the areas of battery materials and cancer research. The initial contract duration will be of 11 months with ample possibilities for extension if the evaluation is positive. Our hope is to later on, incorporate the research technician within BCAM's doctoral programme, subject to satisfactory performance. If you are a young graduate passionate about Data Science, AI, Computational Physics, Chemistry, or related fields., and eager to embark on a research career at BCAM, this opportunity is for you. Apply now and become part of our dedicated team at BCAM.</td>
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| **PIs in charge:** Elena Akhmatskaya  
Mauricio Rincón Bonilla  
Henry Andrés Cortés |
Salary and conditions: The gross annual salary of the position will be 19,764€-29,994€

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.*

Nº Positions offered: 1

Contract and offer: 11 months contract with possible extension

Deadline: July 18th, 2024, 14:00 CET (UTC+1)

How to apply: Applications must be submitted on-line at: [https://joboffers.rcamath.org](https://joboffers.bcamath.org)

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**Scientific Profile Requested**

Requirements: ● Applicants must have their Bachelor’s or master’s degree in Data Science, AI, Computational Physics, Chemistry or related fields

Skills and track-record: ● Good interpersonal skills.
● Demonstrated ability to work independently and as part of a collaborative research team.
● Ability to present and publish research outcomes in spoken (talks) and written (papers) form.
● Ability to effectively communicate and present research ideas to researchers and stakeholders with different backgrounds.
● Fluency in spoken and written English.
**Scientific Profile:**

The preferred candidate will have:

- Experience with Statistical models/Data science, preferably with knowledge of Bayesian statistics.
- Solid programming skills, preferably in R, C/C++, Python.
- Experience with Scikit-Learn, Tensorflow, Keras, PyTorch, XGBoost, LightGBM, SHAP.
- Working knowledge of Linux and job schedulers (e.g. Slurm, Torque, etc).
- Interest in energy/medical applications.
- Background knowledge in Monte Carlo and molecular simulation methods, as well as mathematical modelling and data analysis is highly desirable.
- Basic knowledge of LAMMPS and atomistic visualization software (VMD, Ovito).

**Application and Selection Process**

**Formal Requirements:**

The selected candidate must have applied before the application deadline online at the webpage: [https://joboffers.bcamath.org](https://joboffers.bcamath.org)

The candidates that do not fulfill the mandatory requirements will not be evaluated with respect to their scientific profile.

**Application:**

Required documents:

- CV
- Letter of interest in English describing which topics the candidate is interested in researching.
- 2 recommendation letters
- Academic record: including undergraduate and master-level courses attended and grades and scientific results achieved and research statement is NOT required (leave blank in application form).

**Evaluation:**

Based on the provided application documents of each candidate, the evaluation committee will evaluate qualitatively: the adaption of the previous training and career to the profile offered, the recommendation letters, the main
results achieved (papers, proceedings, etc.), the statement of past and proposed future research and other merits; taking in account the alignment of these items to the topic offered.

**Incorporation:** 1st September 2024