Data Scientist

Description

Company Description

By 2050, the planet could be using twice as much electricity compared to today. Are you interested in contributing and helping to shape the future of the world's energy? If so, read on.

Fusion, the process that powers the Sun and Stars, is one of the most promising options for generating the cleaner, carbon-free energy that our world badly needs.

UKAEA leads the way in realizing fusion energy, partnering with industry and research for groundbreaking advancements. Our goal is to bring fusion electricity to the grid, supported by tomorrow's power stations. In pursuit of our mission, UKAEA embraces core values: Innovative, Committed, Trusted, and Collaborative.

As an employee of UKAEA you will benefit from:

- Outstanding defined benefit pension scheme, details of which can be found at the end of this advert.
- Corporate bonus scheme up to 7% and a Relocation allowance (if eligible).
- Flexible working options including family friendly policies and the right to request flexible working from the start of your employment.
- Employee Assistance Programme and trained Mental Health First Aiders.
- Generous annual leave allowance starting with 25 days, plus 3 days
 Christmas closure and 2.5 privilege days, in addition to UK bank holidays.
- Wide range of career development opportunities.
- A vibrant culture committed to equality and being fully inclusive.

The salary for this role is £38,620 (inclusive of a Market Premium Payment (MPP))

UKAEA's pay arrangements and grading structure are currently under review as part of a transformation project and proposed multi-year pay deal. UKAEA aims to introduce a new grading structure in 2024. This will enable us to lead the delivery of sustainable fusion energy and maximise the scientific and economic benefit. Now is a great time to join the Organisation and be part of the journey.

This role requires employees to **complete an online Baseline Personnel Security Standard (BPSS)**, including The Disclosure & Barring Service (DBS) checks for criminal convictions.

Job Description

The Role

Are you looking for an exciting opportunity to make a difference?

Hiring organization

Candidate-1st

Employment Type

Full-time

Beginning of employment

asap

Job Location

Culham, United Kingdom

Working Hours

40

Base Salary

euro GBP 38K+

Date posted

May 23, 2024

Join our team and contribute to the future of fusion energy.

As **Data Scientist**, you will play a pivotal role in the Data Solutions team at UKAEA conducts support, research, and development across diverse areas such as cloud computing, high-performance computing, algorithm development, engineering and scientific computing, artificial intelligence, machine learning, and Exascale technologies. We work at the forefront of engineering and science, ensuring fusion reactors are well understood and engineered, with our research directly informing engineering efforts. Currently, we're seeking individuals for Artificial Intelligence & Machine Learning roles to contribute to various projects, providing software development, data analysis, and user support. You'll also engage with partners to ensure access to top facilities and assist in report preparation, actively meeting user needs.

Additional Responsibilities:

- Work in a team to support development of AI and Machine Learning tools and investigate novel approaches to improve data science capabilities for experiments on JET, MAST-U and other fusion devices.
- Exploit the convergence of AI and HPC at the Exascale.
- Contribute to reporting results and outreach within and outside the organization.

Qualifications

Essential Requirements:

- Master's degree in computational, mathematical, or physical science discipline, or equivalent experience.
- Demonstrable proficiency in at least one compiled language (e.g., C++, Fortran, C, Rust) or advanced scripting language (e.g., Julia, R, Python, Swift Parallel Scripting).
- Strong experience with UNIX operating system, particularly the command line interface.
- Demonstrable experience in common AI/ML frameworks such as <u>PyTorch</u>, TensorFlow, OpenNN.
- Knowledgeable in different types of neural networks and other ML techniques, including Gaussian Processes, confidence measures, clustering techniques, and application of neural networking techniques.

Desirable Requirements:

- Ability to travel within the UK and Europe for short periods (1-5 days).
- Actively participate in internal and external events, including presenting work and supporting users in adopting outputs.

Additional Information

A full list of our benefits can be found here https://careers.ukaea.uk/life-at-ukaea/employee-benefits/

We welcome applications from under-represented groups, particularly individuals from black and other ethnic minority backgrounds, people with disabilities, and women. Our Executive team, supported by our 'Equality, Diversity and Inclusion'

(EDI) Partner and Inclusion Ambassadors, actively promotes EDI and takes steps to increase diversity within our organization. We reinforce best practices in recruitment and selection and evaluate approaches to remove barriers to success.

Please note that vacancies are generally advertised for 4 weeks but may close earlier if we receive a large number of applications.

How the process will look like

Your teammates will gather all requirements within our organization. Then, once priority has been discussed, you will decide as a team on the best solutions and architecture to meet these needs. In continuous increments and continuous communication between the team and stakeholders, you're part of making data play an even more important (and understood) part withing Brand New Day.

Job Benefits

GBP 38K+