

# Data Engineer

## 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."

## Job Description

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.
- **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 **level 4 – £35,520 plus Market Premium Payment (MPP) of £3,100**

*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.

## The Role

Are you looking for an exciting opportunity to make a difference? Join our team and contribute to the future of fusion energy. As **Data Engineer**, you will play a central role within hardware/software development projects spanning the Authority's programmes, helping to develop HPC (High Performance Computing) infrastructure

## Hiring organization

Candidate-1st

## Employment Type

Full-time

## Beginning of employment

asap

## Job Location

Culham, United Kingdom

## Working Hours

40

## Base Salary

euro GBP 35K+

## Date posted

May 18, 2024

towards ITER and the era of Big-Data and Exascale computation. This role has a bias towards High Throughput Computing (HTC) workflows and cloud-based computing in support of experiments (e.g. MAST-U).

### **Additional Responsibilities:**

- Collaborate with national and international partners across universities, research labs, and industrial organisations to deliver projects focused on data delivery, data object storage, and data-centric high-performance computing. Engage in approximately 3-4 projects annually, contributing to innovation and growth of UKAEA's capabilities in this domain by leveraging external resources.
- Work within a small, focused project team to innovate and develop crucial elements of CCFE's data infrastructure, particularly in cloud technology, supporting various UKAEA activities such as Tokamak Science, Technology & Engineering. Regularly report progress on sub-projects, internally and externally, including presentations at conferences and workshops internationally.

### **Qualifications**

#### **Essential Requirements:**

- Possession of a relevant scientific/engineering/computing degree or equivalent experience.
- Demonstrated expertise in software lifecycle management, including proficiency in at least one high-level programming language.
- Experience in developing and supporting large-scale applications across the software lifecycle.
- Familiarity with coding, testing, and documenting best practices, including version control systems like Git.

#### **Desirable Requirements:**

- Proficiency in one or more of the following programming languages: Python, Matlab, C++, Julia.
- Established network within the EU Fusion programme and connections to international HPC communities, showcasing contributions made to the field.
- Experience in workflow management systems such as Apache Airflow.
- Familiarity with Research Data Management methodologies, modern database technologies including SQL, NoSQL and Graph Databases, and parallel file access technologies such as MPI-IO.

### **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 35K+