



## **Role: Scientist (Full Time)**

**Based at the heart of the Cornish Space Cluster, Aspia Space is an exciting, ambitious new company working at the frontier of AI and Earth Observation. Our main focus is global food security and sustainability: we are using observational data to inform decisions that result in higher productivity but lower environmental impact. We are pushing data to its limits to deliver insights no one else can.**

**We are growing our R&D team.**

**We are not just seeking “another data scientist”. Of course, you will be able to handle and analyse all types of data (both big and small), but what we are really looking for are candidates who can solve hard problems in innovative ways, bringing to bear scientific rigour and critical analysis alongside creativity and left-field thinking.**

**We seek candidates who can adapt to new challenges with confidence and initiative, are able to synthesise, create and apply new knowledge and techniques that might transcend traditional disciplinary boundaries, and who are able to effectively communicate their ideas and results with others.**

**At Aspia Space we aim to create a challenging and stimulating working environment that allows our team to enjoy the best parts of academic freedom and excellence, championing a high-risk/high-reward approach and encouraging out-of-the-box ideas. At the same time, we have a laser focus on solving hard problems for our clients, developing new tools and techniques to help them prosper in a changing and volatile world.**

### **Location**

- Tremough Innovation Centre, Penryn, Cornwall, TR10 9TA.
- Remote working possible.

### **Working hours**

- 37 hours per week.
- Flexible hours possible.

### **Salary**

- £35k-50k per annum (depending on experience) plus bonuses.

### **Benefits**

- Holiday entitlement: 25 days per annum plus Bank holidays (up to 5-day rollover).
- Company pension.
- Private Medical and Dental Insurance.

### **Roles and Responsibilities**

- Be an integral part of the R&D team, working to develop existing products and services, and to create new ones.
- Work on applying bleeding-edge neural network models to Earth Observation and remote sensing problems. We are particularly interested in candidates that have a

history of applying neural networks to “out of domain” problems (think text diffusion or image GPT).

- To conduct research of an experimental nature (e.g., proof-of-concept), either in response to external requests/challenges or brainstormed within the team. These may be associated with short deadlines or be more open-ended.
- To contribute to reports, whitepapers and academic articles related to Aspia Space research and product development.
- To document all R&D in an appropriate manner, including good practice in code development and version control.
- To contribute to the preparation of grant applications.
- To participate in and contribute to internal and external meetings, conferences, workshops, tradeshow, etc.
- To help shape the Aspia Space R&D roadmap, contributing new ideas, methodologies and techniques to achieve the mission.

## Requirements

Successful candidates will:

- Have at least a 2.1 undergraduate degree in Physics, Mathematics, or related subject, or otherwise have an exceptional non-traditional background (e.g., open source contributions) (essential).
- Evidence of leading an independent research project (desirable).
- Have a doctorate (PhD) in Physics, Mathematics, or related subject (desirable).
- A publication record (as lead author) in peer-reviewed literature or notable conferences (desirable).
- Have an excellent grounding in fundamental statistics, both in theory and in practice (essential).
- Have experience with contemporary deep learning techniques (e.g., transformers, state space models, diffusion models, neural networks at scale) (desirable).
- Be fluent in Python, with experience of standard libraries/packages such as numpy, pandas, PyTorch, scikit-learn, etc. (essential).
- Be fluent with \*nix operating systems, particularly in use of the command line (essential).
- Have experience of Cloud and/or High-Performance Computing (desirable).
- Have excellent written and verbal communication skills, with the ability to explain complex topics/research findings to experts and non-experts alike (essential).
- Be able to work well individually and in a team (essential).
- Be able to work to deadlines, with excellent organizational skills (essential).

## Application details

Informal enquiries can be directed to Laura Botha [laura.botha@aspiaspace.com](mailto:laura.botha@aspiaspace.com)

Candidates can apply to this position by e-mailing (as a PDF with subject line “Aspia Space Scientist position”) the following materials to [laura.botha@aspiaspace.com](mailto:laura.botha@aspiaspace.com):

- Up-to-date CV.
- Short (max 1-page) statement outlining your motivation for applying for the position.
- Contact details of two referees.

Deadline: open ended