

## Data Scientist/Engineer (Smart Buildings)

### We've laid the foundations. Now it's time to build.

We are an award winning smart building start-up with patented tech looking to disrupt our market and scale globally.

We now have an amazing opportunity for a talented and experienced data scientist and engineer specialising in smart buildings to make a difference in a rapidly progressing business. BlockDox is a data insights engine for building owners and managers. Our core product, called AreaVu, helps organisations manage and exceed their sustainability goals, reduce operational wastage, tackle air quality and improve space utilisation. We have been deployed across a diverse range of customer sites in the UK and worldwide.

The successful candidate will be a self-starter with a go-to attitude, plenty of initiative and a strong desire to pioneer new technology in construction and building operations. You will work closely with our highly experienced data science team, contributing building systems domain expertise and software engineering skills in the development of advanced statistical, machine learning and AI algorithms to solve challenging problems in the built environment. We are looking for an excellent communicator, including a proven ability to explain complex technical concepts clearly and concisely to non-technical people. Excellent problem solving abilities are also important in the role. We are a fully remote, friendly, and international team of highly skilled engineers and scientists.

### Key Skills and Experience:

- STEM degree (MSc/PhD strongly preferred)
- 4+ years as a Data Scientist
- 2+ years engineering in buildings (HVAC, BIM, BMS)
- 2+ years software engineering
- Python
- RESTful APIs
- SQL (ideally PostgreSQL)
- Git
- Cloud services (ideally Azure + AWS)
- Software engineering best practices
- Stats, Data science, Machine Learning, AI (scipy, numpy, pytorch)
- Jupyter Notebooks
- Data visualisation (e.g. Data Studio, Tableau, PowerBI)

### Desirable skills and experience:

- Academic research and publications
- Deployment of machine learning and AI models to cloud production environments
- Probabilistic programming and Bayesian techniques

- Reinforcement learning
- LLM custom training and prompt engineering
- Full software lifecycle
- Linux and command line
- Grafana
- Agile
- IoT (Networking, MQTT, Monitoring)
- Postgres
- DevOps (IoT, Azure, AWS, Docker, Terraform)
- Data engineering (ETL, pipelines)
- MQTT

### **We are looking for someone with:**

- Fluent English who can work the core hours of 10.00-16.00 BST
- Experience and ability developing and configuring statistical, machine learning and AI algorithms to for prediction and categorisation from (mostly) time series data
- Ability to translate scientific notebooks and scripts to performant production ready code
- Passion for writing testable, clean, modular, well-commented, readable and reusable code
- Willingness to adapt to fast changing priorities and learn new skills in a dynamic startup environment
- Desire to contribute to product roadmap and technology choices
- Open and respectful attitude to collaboration and knowledge-sharing in a cross-disciplinary team of experienced engineers and scientists

### **Why work with us?**

We are a small talented and experienced team of engineers and data scientists, who are passionate about solving the biggest problems facing smart cities and urban mobility today.

You will be joining early in the development of a ground-breaking suite of proptech products and services underpinned by artificial intelligence, with the opportunity to be highly influential in the roadmap and progress to mentoring and management as the company grows.

Everyone is fully engaged in product development and future roadmap, from introducing new hardware, to improving processes, architecting our infrastructure, agreeing planning priorities. We're a highly motivated team that have already won several awards together and are now looking to disrupt our market and scale globally.

You will be part of a team of expert engineers and scientists responsible for developing our IoT data pipeline and analytics products. This includes acquiring data from IoT devices and storing in cloud hosted databases, developing transformation and aggregation services, and making the datasets available to the front-end via APIs.

Work in the tech team at BlockDox is stimulating and diverse, one day you will be implementing a visualisation of aggregated occupancy data in a cutting edge interface, the next day developing a customer facing SPA in React, the following day configuring, integrating and testing a new LIDAR sensor.

As a start-up we can engage in rapid R&D and try out new ideas live very rapidly. If you have an interest in IoT, smart cities, app development and UX, artificial intelligence, and scientific research in general you will find BlockDox a stimulating environment.

**Benefits:**

- Fully remote with optional occasional meetings in Central London and client sites in the UK and worldwide
- Flexible Working

Salary is negotiable, dependent on experience.

If you are looking for a new, exciting challenge where you can put your skills and experience to the test and help build one of the most exciting IoT businesses of a generation, get in touch.

Please include a full CV when replying.

**Contact:**

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