Job Description
Software Engineer

About Atheras Analytics

Atheras Analytics is a UK-based company, founded in August 2020 to commercialise research that has been conducted over several years into the effects of atmospheric/weather impairments on Ka-band and Q/V-band satellite links.

The Company has developed a suite of SaaS-based software tools that enables satellite operators to optimise the design and operation of their next-generation Ka-band and Q/V-band satellite networks taking into account atmospheric/weather impairments (in particular rainfall) specific to their region(s) of operation. The core of these tools is an AI-based Outage Prediction Algorithm (OPA) that has been developed from a series of atmospheric attenuation measurements at Ka-band and Q/V-band frequencies taken at multiple locations across Europe over a period of several years and employs advanced machine learning techniques, including neural networks, to train the Outage Prediction Algorithm (OPA) for multiple different operational scenarios.

Main Purpose and Scope of Job

We are looking for a self-driven and enthusiastic Software Engineer, on a contract or permanent basis, to support the improvement and addition of new features for our principal SaaS products which are:

- Satellite Network Design Tool
- Satellite Network Management Tool; and
- UTOPiA – our User Terminal Outage Prediction Algorithm.

Further information on these tools can be found on our website at www.atherasanalytics.com

The Software Engineer will work alongside our product development team, which includes software and machine learning engineers, and our clients which include some of the world's largest commercial satellite operators. Our tech stack is built around Python and React, we use both SQL and No-SQL databases and Message Queuing services. Our SaaS products are deployed on OpenShift Kubernetes clusters.

The scope of the job includes further development of the software, design, and deployment of new products, ensuring the highest quality of the end-to-end product and a high degree of engagement with our customers to ensure that our products meet their needs and are seamlessly integrated into their operational systems.

Principal Duties and Responsibilities

The principal duties and responsibilities of the Software Engineer include:-

1. Analysing user requirements

2. Designing software architecture and developing new products
3. Modifying software to fix errors, adapt to cloud deployment, improve its performance, and create new features
4. Developing innovative, scalable, fault-tolerant software solutions
5. Writing and testing code to ensure compatibility and stability
6. Developing documentation, flowcharts, layouts, diagrams, code comment and clear code to document and demonstrate solutions
7. Developing new user-facing features
8. Building reusable code and libraries for future use
9. Carrying out code reviews via pull requests
10. Working in multi-disciplinary teams to prepare and review user stories and tasks

Skills and Experience Required

In order to be able to successfully fulfil these responsibilities it is expected that the Software Engineer will be strongly results orientated, have excellent inter-personal, customer communication skills and have good knowledge, skills and experience in several (or all!) of the following areas:-

- BSc or higher in Computer Science, Computer Engineering or similar relevant field
- 5+ years of working experience as software engineer
- 5+ years of software development in Python
- Proficient understanding of Django and Django REST frameworks, Flask
- Proficient understanding of HTML, CSS, JavaScript and jQuery
- Working experience with ReactJS
- Working experience with Docker and Kubernetes
- Working experience with git code versioning tool
- Working experience with cloud development technologies
- Experience with relational and non-relational databases
- Experience with testing frameworks for Test Driven Development and Behaviour Driven Development
- Understanding of agile principles and methodologies
- Ownership and pride in the work
- Critical thinker and problem-solving skills
- Understanding of SEO principles (Desirable)

Salary level:	£40,000 - £48,000 per year based on candidate's experience. Employee share option scheme
Place of work:	Atheras Analytics has an office and "hot-desk" facility on the Harwell Campus near Oxford, UK, but it is expected that the principal place of work will be the incumbent's home with face-to-face meetings with colleagues and customers as required.
Commencement date:	As soon as possible

If you are interested in this opportunity please send your CV and a covering letter/email to *recruitment@atherasanalytics.com.*