

Job Description

Satellite Communications Engineer

About Atheras Analytics

Atheras Analytics is the global leader in predicting and managing 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 for maximum network availability. The core of these tools is an AI-based Outage Prediction Algorithm (OPA) which 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 Satellite Communications Engineer. The Satellite Communications Engineer will support both the research and development activities and ongoing customer operations of the company on the satellite communications for GEO and Non-GEO links with applications on Smart Gateway Diversity and Earth Observation among others.

The Satellite Communications Engineer will work on commercial and institutional projects alongside our product development team, which includes software developers and machine learning engineers, satellite engineers.

The scope of the job includes further development of our algorithms and satellite communication software modules that we use in our tools, ensuring the highest quality of the company's research and development and a high degree of engagement with our customers to ensure that our core algorithms meet their needs.

Principal Duties and Responsibilities

The principal duties and responsibilities of the Satellite Communications Engineer include:-

1. Support the Company's satellite network design activities with GEO and Non-GEO constellations by carrying out system design projects using our software tools
2. Develop prototype solutions on Non-GEO constellations to be integrated as features in our products
3. Analysing requirements for both GEO and Non-GEO systems
4. Conduct research on system design for both GEO and Non-GEO links
5. Running and developing link budgets as modules of our tools and as per our client's requests
6. Calculate Non-GEO orbits to be used in the design of Non-GEO Satellite Communication systems

7. Support on writing research proposals and technical part of commercial proposals
8. Support on Project Management and lead working packages
9. Developing documentation, flowcharts, layouts, diagrams, code comment and clear code to document and demonstrate solutions
10. Building reusable code and libraries for future use
11. Carrying out code reviews via pull requests of software engineers to verify the solutions developed are integrated correctly in our tools
12. Working in multi-disciplinary teams to prepare and review user stories and tasks
13. Providing, as part of a team, 24/7 customer support

Skills and Experience Required

In order to be able to successfully fulfil these responsibilities it is expected that the Satellite Communications 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 Electrical Engineering or similar relevant field
- 4+ years of working experience as engineer
- 4+ years of software development in Python
- Proficient understanding of satellite communications
- Proficient understanding of telecommunication systems
- Proficient understanding of link budgets
- Working experience with orbit calculations
- Understanding of atmospheric propagation
- Understanding of ITU-R recommendations
- Understanding of agile software development principles and methodologies
- Ownership and pride in the work
- Critical thinker and problem-solving skills

Citizenship: EU citizenship is not a requirement but would be beneficial

Salary level: £40,000 - £45,000 per year based on candidate's experience.

Attractive employee share option scheme

Place of work Remote working and preferably EMEA. UK Visa sponsorship may be possible for the right candidate

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.