Junior Ground Segment Software Engineer

Axient Systems B.V., Delft

About us

At Axient Systems, we are shaping the future of sovereign space capability. Based in Delft, at the heart of the Dutch aerospace ecosystem, we develop advanced satellite systems that support critical commercial and government missions. Our solutions enable secure communications, defence, security, and resilient infrastructure where performance and reliability are essential.

As a growing and ambitious organisation, we offer professionals the opportunity to contribute directly to innovative space projects that make a real impact on society, security, and technological progress.

We are looking for a software engineer at the start of their career who wants to build the systems through which satellites are planned, commanded and monitored.

The role

You join the team that builds our ground segment: the software through which our satellites are planned, commanded, monitored and maintained. You start on well-defined components under the guidance of a senior engineer and take on more as you learn the domain. The work is Python on the back end, React or Vue on the front end, running on Linux and in containers.

The domain is space, but the craft is software. We do not expect you to arrive knowing spacecraft operations. We expect you to write clean, tested, maintainable code and to learn the domain from the people around you. You work under the ground software architect, alongside our senior ground software engineers, our ICT and DevSecOps engineer, and our security officer.

What you will do

- Build and test features in the ground segment software: mission planning, monitoring and control, and the interfaces to the ground stations and to the customer's systems.
- Write the automated tests for what you build, and keep them running in the pipeline.
- Build and maintain the operator-facing front ends in React or Vue, working from what operations actually needs and not from a specification alone.
- Develop and debug on Linux, and package what you build to run in containers.
- Work on the REST APIs and the event-driven interfaces between our components and with external systems.
- Take part in code review, both as author and as reviewer.
- Investigate and fix defects found in test and in operations, and write up what you found.
- Keep the documentation of your components accurate as they change.

What is yours, and what is not

You own the components assigned to you: the code, the tests, the defects and the documentation. The architecture, the external interfaces and the release decisions sit with the ground software architect and the senior

engineers. You are expected to participate in software design, ask questions and challenge areas you disagree with.

What you bring

- Bachelor's or master's degree in computer science or equivalent.
- Experience with Python.
- Experience in frontend development using React or Vue.js.
- Experience writing automated tests.
- Experience developing and debugging software on Linux.
- Proficiency with Git and experience in collaborative code review workflows.
- Understanding of REST APIs and event-driven systems.
- Understanding of relational database design.
- Understanding of network communication protocols.
- Understanding of software design principles, clean code practices, and maintainable software architectures.
- Familiarity with containerization technologies such as Docker.
- Professional working proficiency in English; Dutch is an advantage.

Desirable

- Experience with satellite ground systems, spacecraft operations, or mission control software.
- Knowledge of CCSDS standards or space communications protocols.
- Exposure to real-time, embedded, mission-critical, or safety-critical software.
- Familiarity with CI/CD practices and tools such as GitLab CI, GitHub Actions, or Jenkins.

Where you can grow

Two directions, depending on where your strength turns out to be. In depth, towards senior ground software engineer, owning the heaviest components and the design decisions inside them. In breadth, towards ground segment engineering, mission operations or DevSecOps, where the software work meets the system and the operators. Which one opens up depends on what you show, not on time served.

What we offer

- A first engineering role on the system through which a satellite is operated, with experienced engineers to learn from.
- Competitive, market-aligned salary and benefits, and room to grow as the organisation scales.
- On-site work in Delft, limited hybrid working possible.

Particularities

This role requires Dutch security screening. You will need a VOG (Certificate of Conduct) to start, which is quick to obtain and lets you begin work on the project immediately.

You might also need a VGB-B clearance. This takes longer, and we support you through it. It is required for some aspects of the role, so you must be eligible for it and willing to undergo the screening, but you do not need to have it in hand to join us.

Interested?

Apply via the vacancy on LinkedIn or the registration form on our website.

In your application, include a short description of one thing you have built: what it does, one decision you made in the design, and what you would do differently now. It can be from your studies, a side project or a job. Applications without this description will not be reviewed.