Full Stack Software Engineer - Modelling & Simulation

Axient Systems B.V., Delft

At Axient Systems we are building sovereign Dutch defence and space capability. From Delft, at the heart of the Dutch aerospace ecosystem, we work for the Netherlands Ministry of Defence and other government and commercial customers across space systems engineering, modelling & simulation, and critical asset security. Our modelling & simulation team develops and operates platforms such as DomeinSIM, our multi-domain simulation platform, alongside Titan Forge and DomeinGARD. We apply them to integrated air and missile defence (IAMD), seabed security, space missions, and the protection of critical assets.

We are looking for a Full Stack Software Engineer to design, build, and maintain software across our solutions, including DomeinSIM, Titan Forge, and DomeinGARD, from backend services and data pipelines to frontend interfaces and cloud deployment.

The Role

You work across the whole stack, supporting digital engineering, situational awareness, AI, data fusion, and decision-support capabilities for defence, maritime, space, and critical infrastructure applications. You work with the System Architect, product managers, AI engineers, and DevSecOps, and your code goes into systems that operators actually use.

Key Responsibilities

- **Application development:** Design, develop, test, and maintain applications; implement solutions per architecture and requirements; write clean, well-documented, testable code; participate in code reviews
- **Frontend:** Build responsive, user-friendly web applications and reusable UI components for operational workflows, dashboards, and data visualisation; integrate with backend services; optimise performance and UX
- **Backend & APIs:** Design and implement backend services, RESTful APIs, and business logic; build scalable components for real-time and near-real-time data processing; integrate sensor data, AI/ML services, databases, and external systems
- **Data:** Develop data ingestion, transformation, and visualisation components across structured and unstructured sources; design database schemas and queries; support data fusion and API- and messaging-based integration
- **AI integration:** Integrate AI/ML capabilities and decision-support tools into applications; collaborate with AI engineers on production deployment; support generative AI and agentic AI use cases
- **Cloud & deployment:** Build applications for cloud, on-premise, and hybrid environments; develop containerised (Docker) applications; support CI/CD pipelines, monitoring, and logging
- **Testing:** Develop unit and integration tests and automated validation; troubleshoot defects and performance issues; support integration testing and demonstrations
- **Agile delivery:** Participate in sprint planning, standups, and retrospectives; translate user stories into implementations; track work in tools such as Jira

Essential Qualifications

- HBO or WO degree in computer science, software engineering, or a comparable discipline
- 3+ years professional software development experience across both backend and frontend
- Proficiency in at least one modern backend language and framework, and one modern frontend framework
- Experience designing and consuming RESTful APIs and working with relational or document databases
- Git-based development workflow and agile team experience
- Fluent English
- On-site work in Delft, limited hybrid working possible
- Willing and able to undergo security screening by the Dutch security services

Desirable Qualifications

- React, Angular, Vue, or a comparable frontend framework
- Spring Boot, .NET, Node.js, FastAPI, or a comparable backend framework
- AWS or Azure cloud experience
- Docker, Kubernetes, and containerisation experience
- CI/CD tooling experience (Jenkins, GitLab CI, GitHub Actions, or comparable)
- Experience integrating AI/ML into applications
- Geospatial visualisation and mapping experience
- Defence, aerospace, maritime, or critical infrastructure application experience
- Digital engineering, MBSE, or digital twin experience
- Working proficiency in Dutch

What We Offer

Full-stack work on systems that end up in front of operators, in an organisation small enough that you see the whole picture rather than one microservice of it. You will be trained on our existing solutions, and when you take on new ones an experienced advisor works alongside you until you can carry them on your own.

A market-aligned salary and benefits reflecting the weight of the role, and room to grow as the Dutch organisation scales.

Interested?

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

In your application, include a short description of one application you built end to end: the stack, what you built yourself versus what the team provided, and one production issue you found and fixed. Applications without this will not be reviewed.