System Architect - 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 System Architect to lead system architecture and technical design across our platforms, including DomeinSIM, Titan Forge, and DomeinGARD, spanning software architecture, systems engineering, data, AI, cybersecurity, and integration.

The Role

This is an internal engineering leadership role. The Technical Solution Architect is the primary customer-facing role and owns that interface, with your support when the technical depth calls for it. Your focus is internal: you take solution architectures and product requirements and turn them into detailed technical designs and implementation plans, working closely with the systems, software, AI, DevSecOps, and cybersecurity engineering teams.

Key Responsibilities

- Define and evolve logical, physical, software, data, and deployment architectures; set architectural standards and design patterns; lead architecture reviews and governance; develop technical roadmaps
- Translate requirements into detailed designs: microservices, APIs, data services, UI, and integration components; define interface specifications and performance, scalability, and resiliency requirements; lead trade studies
- Lead software architecture across teams; define API standards and data models; develop data architectures supporting analytics and AI; establish reusable frameworks
- Define architectures for AI/ML, generative AI, and agentic AI; design integration patterns for decision support and automation; define model deployment, monitoring, and lifecycle requirements
- Define integration architectures and API, messaging, and data-exchange standards (e.g. MQTT, REST, CoT); develop ICDs and technical integration specifications
- Define containerisation and deployment architectures across cloud, on-premise, and hybrid environments; set CI/CD and Infrastructure-as-Code standards; ensure observability and maintainability
- Apply Secure-by-Design and Zero Trust principles; define security controls; conduct security reviews and risk assessments
- Mentor engineering teams; lead architecture and design reviews; resolve complex technical challenges; align architecture with product roadmaps and sprint planning

Essential Qualifications

- HBO or WO degree in computer science, systems engineering, software engineering, or a comparable discipline

- 8+ years designing complex software and system architectures
- Demonstrated leadership of architecture activities for enterprise or mission-critical systems
- Cloud-native and hybrid software architecture experience
- Agile software engineering methodology experience
- Demonstrated leadership of cross-functional engineering teams
- 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

- Experience on MoD, NATO, or European government programmes
- Digital engineering, MBSE, and digital twin experience
- Docker, Kubernetes, and DevSecOps experience
- AWS or Azure experience
- AI/ML architecture and operational analytics experience
- Cybersecurity architecture and Zero Trust experience
- Multi-sensor data fusion or situational awareness systems design experience
- Working proficiency in Dutch

What We Offer

Architectural ownership across a platform portfolio, in an organisation small enough that your standards become the organisation's standards. The designs you make are the ones the teams build. 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 architecture you designed that made it to production: the system, the hardest trade-off you made, and how it held up in practice. Applications without this will not be reviewed.