



Job Title:	Principal Software Engineer	Date Revised:	Apr 2025
Department:	Software Engineering	Job Level:	Senior
Location:	UK	Position Type:	Full Time
Reports to:	Software Engineering Manager	Travel Requirement:	Approx. 10% of time

Company Overview:

Symetrica is a global leader in radiation detection and identification, providing advanced technology solutions for real world challenges. The range of detectors, from handheld devices to mobile solutions and portal monitors, serve customs and border protection, law enforcement and military, emergency services and first responders. Users benefit from the most operationally effective multi-layered radiation detection and identification systems. For the last 23+ years, Symetrica has produced a wide breadth of best-in-class radiation detection solutions. More recently the company has experienced rapid growth as the company has introduced new products and solutions and additionally has scaled the leadership of the commercial teams. The company has dedicated specialist staff and manufacturing plants in Westford (MA) and Southampton (UK) for the design, manufacture, and support of its product range.

Job Summary:

The Principal Software Engineer at Symetrica is passionate about technology, innovative and eager to drive excellence in product architecture and delivery. We are looking for an energetic, detail-oriented, all rounded software engineer with extensive application and embedded development experience to join our talented and dynamic software engineering team.

Primary Duties and Responsibilities:

- Collaborates with internal and external stakeholders (e.g. product management, customers and partners).
- Leads architecture, design, development, and delivery of an Angular-based enterprise application (i.e. the Discovery product).
- Regularly communicates with customer base as a company ambassador and provides remote and/or on-site support to customer installations.
- Leads Agile delivery through planning, refinement, estimation, and iterative execution.
- Guides microservices platform development for telemetry, alerts, search, and operational data.
- Designs secure, scalable interfaces and services for monitoring and device management.
- Optimizes application architectures for scalability and performance.
- Implements and maintains CI/CD pipelines to automate the software delivery processes.
- Leads a team of on-site and offshore engineers across front-end, back-end, and integration work.
- Mentors engineers in full-stack development, Agile practices, and distributed systems.

**Education and Experience:**

- BSc in computer science, electronics, or related field.
- 5+ years firsthand experience in Software Engineering & DevOps.

Required Skills:

- Solid understanding of software engineering principles and full stack development.
- Deep expertise in Angular architecture, components, and modular development.
- Proven success delivering microservices-based distributed enterprise applications.
- Hands-on PostgreSQL experience with data modeling and performance tuning.
- Hands-on Redis experience for caching and fast data access.
- Experience with Elasticsearch indexing, querying, and search optimization.
- Exceptional understanding of REST APIs and asynchronous integration patterns.
- Strong knowledge of authentication, authorization, and secure coding practices.
- Strong understanding of logging, monitoring, and observability.
- Hands-on experience with CI/CD, automated testing, version control, and DevSecOps.
- Experience integrating software with IoT devices and telemetry systems.
- Hands-on experience with infrastructure as code (IaC) tools: Helm Charts, Terraform & Ansible.
- Experience in leading onsite and offshore engineering teams.
- Experience in communicating across the organization and with customers.

Desired Skills:

- Experience building dashboards and real-time monitoring user interfaces.
- Experience in integrating AI features into enterprise applications.
- Experience in radiation detection or safety-critical environments.

Security Clearances:

All candidates must be willing and able to apply for and maintain the correct security clearance for this role as required by our government contracts.

- US Employees - Green Card or US citizenship.
- UK Employees – Baseline Personnel Security Standard (BPSS), Security Check (SC).

Physical Requirements:

- Prolonged periods sitting at a desk and working on a computer.
- Must be able to lift up to 15 pounds at times.

Travel:

Infrequent travel to company sites may be required with appropriate prior notification. This is not expected to take more than 10% of working time, on average.



Other Duties as Assigned:

This job description is not designed to cover all activities, duties or responsibilities that are required of the employee for this role. Responsibilities and activities are subject to change.