

Backend Solutions Architect (Java, Spring Boot & SQL)

Peak Pacific is an aviation learning and technology company with more than 18 years' experience supporting airlines in complex, safety-critical environments. We develop and support digital learning and training technology-driven products and solutions, combining deep aviation knowledge with long-term customer relationships and practical delivery expertise.

We are seeking an experienced **Backend Solutions Architect** with **strong Java, Spring Boot and SQL** experience to take ownership of our established, proprietary aviation training software product, currently used by several airline clients.

The selected candidate will have extensive experience in microservices and enterprise application architecture, with preferred aviation-domain experience and strong customer-facing capabilities. They will work closely with customers and the product team to understand business requirements, define scalable technical solutions, provide architectural guidance, and ensure successful delivery.

Who are we looking for?

Someone who can:

- Take on end-to-end ownership of an existing product and customer base.
- Bring strong software engineering experience, particularly **Java, Spring Boot and SQL**.
- Understand software **technologies and standards** for SaaS and mobile applications
- **Aviation-domain experience**, ideally airline training, crew, pilot or flight operations is a plus.
- Work directly with airline customers and leadership team to translate specialist requirements into practical technical and product decisions.
- Guide architecture, integrations, APIs, databases and engineering delivery.
- Balance reliability, customer needs, technical debt and future product development.
- Resolve complex product and technical issues hands-on, rather than operating only at a strategic level.
- Operate autonomously across lean, distributed teams and reduce dependency on senior leadership for routine decisions.

Responsibilities:

- Design scalable, secure, maintainable, and high-performance backend architectures.
- Define the technical architecture for Java, Spring Boot, and microservices-based applications.
- Convert aviation business requirements into appropriate technical solutions.
- Define API, database, integration, security, deployment, and infrastructure strategies.
- Create high-level and low-level technical designs.
- Review existing systems and recommend modernisation or performance improvements.

- Define database architecture, data models, indexing strategies, and query-optimisation standards.
- Design REST APIs and integrations with internal and external systems.
- Establish coding standards, architectural principles, and development best practices.
- Conduct architecture reviews, code reviews, and technical risk assessments.
- Guide development teams during implementation and resolve complex technical issues.
- Ensure solutions meet security, scalability, availability, and performance requirements.
- Work with DevOps teams to define CI/CD, deployment, monitoring, and disaster-recovery strategies.
- Evaluate new technologies and conduct proof-of-concept implementations when required.

Customer-Facing Responsibilities

- Participate in customer meetings, workshops, and technical discussions.
- Gather and clarify functional and non-functional requirements.
- Present proposed architecture and technical solutions to customers and stakeholders.
- Conduct product demonstrations and explain complex technical concepts in business-friendly language.
- Provide technical estimates, identify dependencies, and communicate delivery risks.
- Support customers during UAT, production deployment, and post-production activities.
- Investigate critical customer issues and coordinate their resolution.
- Manage customer expectations and provide regular technical progress updates.
- Collaborate with globally distributed customers and teams across different time zones.

Aviation-Domain Experience

- Experience working with airlines or aviation-related products is required.
- Understanding of aviation training, crew management, flight operations, assessments, compliance, or safety-management processes.
- Experience designing solutions aligned with aviation operational and regulatory requirements.
- Ability to communicate effectively with aviation subject-matter experts and convert domain requirements into technical architecture.

Required Technical Skills

- Strong hands-on knowledge of Java and Spring Boot.
- Expertise in microservices and distributed-system architecture.
- Strong experience with Spring MVC, Spring Data JPA, Hibernate, and Spring Security.

- Advanced SQL knowledge, preferably with MySQL.
- Experience in database design, normalisation, indexing, execution-plan analysis, and query optimisation.
- Experience designing secure and versioned REST APIs.
- Strong understanding of system-design and enterprise-integration patterns.
- Experience with OAuth 2.0, JWT, SSO, and identity-management solutions such as Keycloak.
- Knowledge of event-driven architecture and technologies such as Kafka or RabbitMQ.
- Experience with caching technologies such as Redis.
- Experience with Docker, Jenkins, and CI/CD pipelines.
- Knowledge of cloud platforms such as AWS, Azure, or Google Cloud.
- Experience with application monitoring, logging, and performance-management tools.
- Understanding of data migration, legacy-system modernisation, and third-party integrations.

Leadership Skills

- Ability to lead and mentor backend development teams.
- Strong decision-making and problem-solving abilities.
- Ability to evaluate technical trade-offs and recommend appropriate solutions.
- Strong ownership of architecture, quality, performance, and security.
- Ability to coordinate with engineering, QA, DevOps, product, and business teams.
- Excellent communication, presentation, and stakeholder-management skills.

Qualifications & Experience

- Bachelor's or Master's degree in Computer Science, Information Technology, or a related field.
- Minimum 10 years of software product development experience.
- Minimum 10 years of experience in a Backend, Technical, or Solution Architect role.
- Strong hands-on experience with Java, Spring Boot, SQL, and microservices.
- Previous aviation-domain and customer-facing experience is preferred.

Why Join Us:

At Peak Pacific, you will help shape impactful digital learning experiences for globally recognised clients while working at the intersection of creativity, technology, and performance. You will join a collaborative, innovation-driven team where ideas are encouraged, expertise is continuously developed, and your work creates meaningful value across industries.

**What We Offer:**

We offer the opportunity to work with leading global clients, contribute to impactful learning solutions, and grow your career in a dynamic, innovation-driven environment. Interested candidates are invited to send their resume to careers@peakpacificgroup.com.

We will use all personal data collected for recruitment purposes only and retain it for up to 90 days.