
Professional Summary

Results-driven **Principal/Senior Software Engineer** with **17 + years** of hands-on experience designing and delivering high-performance, cloud-native platforms for Smart-City, Aerospace, and Real-Money Gaming domains. Repeatedly recognized for turning complex requirements into **scalable microservices, real-time data pipelines, and resilient event-driven architectures**.

- **Architected an edge-to-cloud IoT platform for connected energy-management devices**, securely onboarding millions of field units and exposing real-time telemetry and remote-command APIs to companion mobile/web apps—enabling users to monitor usage statistics, schedule operation profiles, and deploy over-the-air updates from a single dashboard.
- **Polyglot engineer & AWS-certified architect** – deep expertise in Java, Kotlin, and Python, with a track record of optimizing JVM workloads for low latency and high throughput.
- **Tech-lead & mentor** – build and nurture cross-functional teams, establish engineering best-practices (TDD/BDD, CI/CD, DevSecOps), and drive delivery road-maps that align with strategic business goals.
- **Product-minded problem-solver** – partner with stakeholders to shape vision, prioritize features, and ship secure, maintainable software that unlocks new revenue streams and operational efficiencies.

Skills Summary

Languages	Java 17, Kotlin, Python
Frameworks & Libraries	Spring boot / Spring Cloud, Hibernate & JPA, Angular
Cloud & DevOps	AWS, Docker, Kubernetes, CI/CD with GitHub Actions & Bamboo
Data & Messaging	PostgreSQL, MySQL, DB2, Firebird, MongoDB, Kafka, RabbitMQ
Architecture Patterns	Microservices, Event-Sourcing, RESTful & gRPC APIs
Quality & Methodologies	TDD, BDD, Domain Driven Design, Agile/Scrum, Gradle & Maven build pipelines

Employment history

Elemental Concept | *Senior Software Engineer*
February 2024 – To Date | *London, U.K.*

Technical Environment: Kotlin, Java 21, Node.js, Python, Spring Boot, RabbitMQ, MySQL, PostgreSQL, Microservices, cloud-native container orchestration & CI/CD pipelines

- **Architected a real-time market-data ingestion pipeline** that processes 50 k + price updates per second from multiple global sources while sustaining sub-100 ms end-to-end latency.
- **Delivered Kotlin/Spring Boot microservices via cloud-based container platforms and automated CI/CD pipelines**, implementing rolling updates and autoscaling to maintain high availability with zero user-visible downtime.
- **Optimised RabbitMQ streams for ultra-fast fan-out**, achieving p99 delivery under 5ms across ~300 k messages per minute through queue sharding and consumer-prefetch tuning.
- **Worked on multi-layer anti-automation measures** — dynamic **IP-rotation algorithms**, adaptive client fingerprints and headless-browser CAPTCHA handling—to ensure reliable, large-scale data capture from protected sources.
- **Led the organization-wide database migration from MySQL to PostgreSQL**, refactoring repository code, and tuning indexes—cutting complex query times by up to 40 %.
- **Spearheaded the platform upgrade from Java 11 → 21 and Spring Boot 2 → 3**, introducing container hardening and compatibility test suites that improved startup times and security posture.
- **Built a unified alerting system** that routes incidents via SMTP, Slack and Mattermost APIs, reducing mean-time-to-detect by 35 %.
- **Established a comprehensive observability stack** with Prometheus metrics and Grafana dashboards to verify new deployments in real time and ensure code works as intended.
- **Mentored a cross-functional squad of junior engineers** through pair-programming sessions and rigorous code-review practices, accelerating their ramp-up and boosting overall code quality.
- **Operated within a self-sufficient, cross-disciplinary team** responsible for end-to-end delivery—architecture, infrastructure, testing, development, deployment and on-call support.

Ballys Interactive | *Senior Software Engineer*
July 2022 – August 2023 | *London, U.K.*

Technical Environment: Java 17, Spring Boot, REST API, IBM Db2, MySQL, Liquibase, Docker, Microservices, Apache Kafka, Kubernetes, Ansible, TDD.

- Upgraded all microservices owned by the payments team to the latest Java 17 and Spring Boot versions, ensuring the adoption of cutting-edge technologies and enhancing the overall performance and compatibility of the system.
 - Isolated the database for the critical payment-service component by optimizing and eliminating tables not owned by this module. This strategic action significantly enhanced the efficiency and organizational structure of the system, focusing on the core database elements crucial for the component's functionality.
 - Reorganized the responsible gaming and wallet functionalities previously embedded in the payment-service, extracting and relocating them into specialized microservices. This strategic restructuring aimed to bolster scalability and maintainability while fostering independence for these critical features.
 - Implemented auto-withdrawal functionality within the payment service, enabling users to access funds instantly, eliminating the previous waiting period of up to 4 days. This enhancement also removed the need for manual account checking by payment administrators.
 - Continued emphasis on quality and testing in peer reviews and code walkthroughs.
 - Collaborated with cross-functional teams to integrate their innovations into our processes and reciprocally shared our advancements, fostering a synergistic approach to innovation and promoting a culture of continuous improvement.
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Signify (Telensa Limited)
April 2019 – March 2022

/ Senior Software Engineer
/ Cambridgeshire, England, United Kingdom

Technical Environment: *Java 11, Spring Boot, REST API, PostgreSQL, Firebird, Docker, Microservices, RabbitMQ, Ansible, Junit, WireMock.*

- **Lead developer for Java/Spring Boot satellite services** around the core platform, owning design, implementation and integration to deliver end-to-end smart-city functionality.
- **Delivered a standards-compliant TALQ Central Management System**, enabling interoperability across heterogeneous street-lighting controllers, sensors and gateways; implemented device onboarding, inventory, command & control, scheduling and fault reporting.
- **Designed robust REST APIs** with clear versioning, idempotency and pagination; documented interfaces (OpenAPI/Swagger) and enforced backward compatibility through contract tests (WireMock).
- **Built event-driven workflows with RabbitMQ**, handling high-volume telemetry and command acknowledgements using reliable delivery, DLQs and back-pressure controls.
- **Optimised data access on PostgreSQL and Firebird**, tuning queries and indexes, introducing connection-pooling and caching strategies to improve responsiveness and throughput.
- **Migrated microservices to Java 11 and latest Spring Boot**, refactoring deprecated APIs, improving start-up and memory footprint, and hardening dependencies for security and stability.

- **Containerised services** with Docker and automated deployments via Ansible, enabling consistent, repeatable releases and rolling updates across environments.
 - **Instituted a pragmatic test strategy** (JUnit, integration and contract tests) that raised coverage and reduced regressions; built isolated service stubs with WireMock for reliable CI pipelines.
 - **Drove quarterly release management**—coordinating cut-overs, release notes and stakeholder comms—while maintaining high availability across production environments.
 - **Collaborated cross-functionally with product**, QA and field teams to refine requirements, triage issues and accelerate delivery of customer-visible features.
 - **Mentored junior engineers** through pair-programming and structured code reviews, improving onboarding speed, code quality and engineering standards.
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Alteatec IT Solutions Pvt Ltd. | Head Of Department - Casino Management
July 2013 - March 2019 | Malta

Technical Environment: *Java 8, J2EE, Spring Boot, REST API, Angular, PostgreSQL, Microservices, ActiveMQ, Junit.*

- **Drove the end-to-end architecture of a full-stack iGaming platform**, spearheading core services such as wallet, bonus engine, CMS, tournaments and real-time fraud detection; delivered a modular design that handled >1 million player sessions/day with 99.98 % availability.
 - **Led the migration to a Spring Boot microservices landscape**, decoupling monolithic modules into independently deployable services that cut feature lead-time by 40 % and simplified horizontal scaling.
 - **Integrated 30 + third-party providers** (payment gateways, casino/slot game engines, sportsbook feeds, email/SMS gateways) through resilient, versioned REST and message-queue contracts, expanding market offering while maintaining sub-second transaction times.
 - **Secured technical certifications** from multiple Tier-1 regulators (MGA, UKGC, Curacao) by embedding robust KYC, AML and audit-logging capabilities—achieving first-pass approval and enabling entry into three new jurisdictions.
 - **Championed DevOps practices**—Dockerized workloads, automated CI/CD pipelines, and proactive monitoring—reducing deployment rollback incidents by 60 %.
 - **Represented the company at global industry conferences** and technical workshops, forging strategic vendor relationships and showcasing platform capabilities to prospective B2B partners.
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Rofous Software Pvt. Ltd. | Senior Software Engineer
February 2012 - June 2013 | client location, Google India Pvt. Ltd, Gurugram, India.

Technical Environment: *Python, Selenium.*

- Conceived and executed the development of a highly scalable and robust Python-based framework designed for crawling and scraping price information from partner websites, particularly those featuring AJAX and JS-heavy content. This implementation aimed to efficiently handle dynamic web elements, ensuring accurate retrieval of pricing data in a reliable and scalable manner.
 - Used Selenium web-driver for crawling the partner sites and interacting with various DOM elements. Scrapes data over 1 million URLs a day and 500+ travel partner sites.
 - Automated the reporting process by analysing application-generated data, specifically focusing on discrepancies in price information. This system provided daily insights via email for management, ensuring accuracy in Google search displays by comparing and verifying price information against partner websites.
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Infosys Limited | **Senior Software Engineer**

Nov 2007 - Jan 2012 | Bengaluru, India.

Technical Environment: *Python, CATIA, ENOVIA.*

- Application owner of commodity automation tools suite for Boeing. This suite captures and validates customer preferences for interior configuration of an airplane and contains 14 applications for all the major domains such as Floors, PSU, etc.
 - Responsible for understanding the requirements and following all the life stages of SDLC, starting from client requirements to designing and implementation of the application.
 - Automation of processes in CATIA, Enovia using Python.
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Certifications & Awards

<https://www.credly.com/users/harsh-hajela>

- Amazon Web Services – Cloud Practitioner & Solutions Architect Associate
 - AgilePM – Foundation & Practitioner
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Personal Details

Education: Bachelor of Technology (Mechanical engineering, U.P.T.U., India, 2007)

Languages: English, Hindi

Nationality: Indian

Visa Status: Indefinite Leave to Remain – settled status, United Kingdom

References: Available on Request