

Over **25** years experience delivering high-quality software including cross-platform native apps and web applications for diverse clients across multiple industries. Takes a customer-centric approach to produce clean, usable solutions that drive real value. Skilled at clarifying requirements and avoiding unnecessary rework or over-engineering, saving clients time and cost. Expert across multiple languages, platforms, and frameworks, with extensive experience in modern development tools, best practices, and **next-generation AI productivity tools**. Adaptable and quick to master new technologies. Effective as an independent contributor, team collaborator, mentor, and technical lead.

Key strengths: true full-stack developer (including professional cross-platform apps), productivity with a focus on quality and usability, scalable and performant backend services, clean and testable code, and software that is easy to maintain and extend.

Skills Summary

- Full Stack Web Development
- Software Architecture and Design
- UI, UX, Accessibility and Front End Development
- DevOps, Continuous Integration and Delivery
- System Integration
- Utilization of AI Coding Tools
- Cross Platform Native App Development
- Enterprise Java Development
- Databases (relational and NoSQL)
- Automated Testing
- GIS
- Software Craftsmanship

Development Experience

Senior Full-Stack Engineer (Angular + Java) | Global Settlement (Bank of New York)

April 2022 - Now

Delivered mission-critical features for the global settlements platform for US treasuries handling trillions of dollars and 100's of thousands of treasury movement transactions per day. Built and upgraded Angular front ends and Java services with strict accuracy, audit-ability, and resiliency requirements. Worked on a US treasuries tokenization proof-of-concept to explore blockchain based workflows for issuance, transfer and settlement instead of the current centralized books and records. Implemented a dealer default/market-stress workflow to orchestrate movement of overnight loan collateral during counterparty failures, with controls for approvals, entitlements, and complete audit trails.

- Full-stack delivery: Angular (TypeScript) UIs and Java services (Java EE → Spring Boot) for high-throughput, low-latency settlement flows.
- Worked on US Treasury Tokenization PoC - integrating smart-contract lifecycles with existing books and records.
- Dealer Default, Automated collateral delivery : quick and accurate system to move loan collateral under market stress with auditable operations.
- Messaging with ActiveMQ / IBM MQ for reliable, ordered transaction processing and back-pressure handling.
- Multi-datacenter Oracle database with transactional guarantees.
- Applied secure coding certification practices, code scanning and rigorous reviews.
- Pragmatic productivity: leveraged AI coding tools to accelerate boilerplate and test generation.

Tech: TypeScript, Angular, Java EE, Spring Boot, Oracle, ActiveMQ, REST, Ethereum (PoC), CI/CD, Secure Coding, Github CoPilot for AI assisted coding and productivity.

Built a location-aware React Native app (Expo) with maps and push notifications. Implemented secure sign-in (Apple/Google) and in-app subscriptions on both stores, backed by a Spring Boot REST API issuing/validating JWT access + rotating refresh tokens. Designed and ran high-availability Linux servers, provisioned TLS certificates, and introduced Redis caching to handle concurrent traffic efficiently. Persisted data in PostgreSQL with PostGIS for spatial queries (distance/geo filters), delivering a responsive experience end-to-end.

- Expo React Native restaurant discounts app with location, maps, and push notifications
- Apple/Google authentication (OIDC) and App Store / Google Play subscriptions.
- Spring Boot 3.x REST services with JWT auth & vendor-data protection.
- HA Linux deployment (reverse proxy/load-balancing ready), TLS certs managed by me.
- Redis caching to cut DB load and improve throughput; PostgreSQL + PostGIS for geo.

Tech: React Native (Expo), Apple/Google Sign-In, Apple/Google Subscriptions, Push Notifications, Spring Boot, JWT (access/refresh), Redis, PostgreSQL, PostGIS, Linux (HA deployment), TLS/HTTPS.

Senior Full-Stack Engineer (Angular + Java) | Quoting & Ordering (Windstream)

Dec 2014 - April 2022

Key contributor across multiple Agile initiatives on online quoting and ordering platforms. Developed the primary Angular/Java/Oracle quoting application with deep integrations to upstream/downstream systems. Partnered with a vendor on a prospective Angular/Node.js/Mongo alternative. UI redesign of the Quoting app and developed a Spring Boot microservices-based ordering system deployed to Kubernetes. CI/CD, and developer mentorship across onshore/offshore teams.

- Developed core features and integrations in the Angular/Java/Oracle quoting system over several years.
- Developed on a next-gen Angular/Node.js/Mongo quoting stack application.
- Led a UI redesign of the Quoting application (bootstrap themes).
- Key Java development for a new ordering platform using Spring Boot REST microservices on Kubernetes.
- Migrated services to K8s and set up Azure DevOps (ADO) CI/CD pipelines (build, test, deploy).
- Mentored and managed junior/offshore developers; established code standards and review practices.
- Long-term consultant with numerous successful extensions due to consistent delivery and systems knowledge.

Tech: Java, Spring Boot, Groovy, JavaScript/TypeScript, Angular, Node.js, Docker, Kubernetes, Azure DevOps, Kafka, Oracle, SQL Server, MongoDB.

Full-stack iOS Engineer | Swift + Spring Boot

2016-2022

Designed and built my own professional grade iOS fitness app with advanced features that were missing in other fitness apps. Provides multiple customizable recording screens with map and intended route, live tracking, live messaging, friends locations, detailed live fitness and performance stats. Integrated Bluetooth LE to pair with fitness peripherals (heart-rate straps, bike sensors), handled background location for continuous sessions, and delivered realtime updates to the backend. Server side was a Spring Boot API with JWT auth, MongoDB for activity storage, and Dockerized services, plus push notifications for live events and session status.

- Native Swift app with a highly configurable recording screen (multi-metric layout, quick toggles) and live tracking.
- Bluetooth LE integration with fitness peripherals; robust pairing/connection lifecycle and data streaming.
- Background location capture with efficient battery use for long workouts
- Spring Boot backend issuing/validating JWT; secure endpoints for activity ingest and live tracking.
- MongoDB for time-series/activity documents; services packaged and deployed as Docker images.
- Push notifications (APNs) for live updates and session status.

Tech: Swift, MapKit, CoreData, Bluetooth, Mongo, REST, NGINX, Linux , Push Notifications, Spring Boot, JWT (access/refresh), Linux (HA deployment), TLS/HTTPS.

Key contributor across web and mobile surfaces in a fast-paced Agile/Scrum environment. Built front-end experiences and backend services, integrated multiple 3rd-party video players, and implemented token-based authorization for secure playback across devices. Optimized delivery with NGINX/Varnish, established CI/CD with Maven/Jenkins, and shipped features end-to-end with strong SOA/REST practices and rigorous code review/version control.

Tech: Java, Scala, Play Framework, Spring, JavaScript, LESS, Backbone, Handlebars, Grunt, Cordova, RequireJS, Git, SOA, REST, NGINX, Varnish, Maven, Jenkins.

Delivered two major map-platform projects in an Agile/TDD setting. Built the OpenSpace Google/Bing-style WMTS and JavaScript API on OpenLayers, working end-to-end across JS API & HTTP endpoints, Java services, data layers, and Linux automation—hosted on AWS EC2. Led the OnDemand WMS redevelopment using an all-open-source stack, deploying to EC2 with Puppet for rapid auto-scaling and resilience. Introduced a company-wide Selenium 2/WebDriver regression framework for cross-browser + mobile (iOS/Android) testing, and authored a multi-threaded Bash pipeline that reduced raster map sizes by up to 50%, cutting bandwidth and improving performance. Added FitNesse for collaborative acceptance tests and maintained strong CI with Maven/Jenkins.

Tech: Java 1.6, Spring 3.0.5 (Security, MVC, Integration), JPA/Hibernate, GEOServer, PostgreSQL/PostGIS, MySQL, AWS EC2, CentOS Linux, Puppet, OpenLayers 2.12, JavaScript, Jasmine, Selenium 2/WebDriver, Bash, Maven, Ant, Jenkins, JMeter, FitNesse.

Delivered end-to-end features for a rich, map-centric web app. Built an OO JavaScript front end with Dojo/jQuery on top of Struts 2 (JSPs, filters, taglibs) to create a seamless RIA. Designed and consumed REST services for map data/images/configuration and integrated ESRI ArcGIS Server SOAP services from Java components. Uplifted engineering practice by introducing peer code reviews, moving builds to full CI with Hudson/Ant, and adding Selenium UI test automation. Produced high-quality PDFs via iText and custom rendering with Java2D.

Tech: Java, J2EE, Struts 2, JavaScript (Dojo, jQuery), HTML/CSS, REST/SOAP, ESRI ArcGIS Server 9, ESRI JavaScript API, Selenium, Hudson (Jenkins), Ant, Java2D, iText.

Collaborated to deliver robust, enterprise-grade features with strong SDLC discipline. Enforced high standards of quality control: unit/integration testing (JUnit, JMock), continuous integration, coverage analysis, and peer reviews. Diagnosed and resolved complex Oracle and Java performance issues (including OutOfMemoryError investigations with JProfiler). Designed and implemented a comprehensive Canoo WebTest regression framework that automated asynchronous end-to-end scenarios, saving significant manual test effort each build cycle. **Tech:** Java, J2EE, JSP, Struts, Spring, Hibernate, SQL, Oracle 9i/PL/SQL, Oracle performance tuning, AJAX, XSLT, XSL-FO/FOP, IBM WebSphere 5.1, JMS, MQSeries 5.1, JUnit, JMock, CruiseControl, IFS, Canoo WebTest, Groovy, Grails.

Delivered multiple, consecutive contracts as a key engineer across a large geo-referencing system for the Office for National Statistics, a mobile workforce scheduling platform, and a high-profile interactive mapping site for the Environment Agency. Designed and built distributed n-tier solutions (Struts/Spring/EJB) with REST/SOAP services, implemented Oracle PL/SQL packages, and led performance tuning across JVM and database layers. Produced server-side integrations via Apache Axis web services and CORBA contributed UI layers (JSP/Struts) and mapping integrations (ESRI ArcIMS/ArcSDE, MapInfo), and introduced stronger engineering practices—peer reviews, CI, and automated regression testing—that improved delivery predictability. Provided technical leadership on code-level design, mentored team members, and ensured each release met milestones under tight timelines. **Tech:** Java/J2EE, JSP, Struts, Spring, EJB, REST/SOAP, Apache Axis, CORBA, Oracle 9i/10gAS, PL/SQL, WebLogic 8.1 (clustering), Tomcat, OC4J, ESRI ArcIMS/ArcSDE, MapInfo, SQL, Solaris/Unix shell scripting, ANT, Maven (if used), CVS/Visual SourceSafe, Eclipse.

J2EE Web Developer | Web & Systems Integration (Vodafone UK)**Mar 2000 - May 2004**

Delivered Java web apps and complex integrations for Vodafone Corporate Online. Lead developer on several projects, driving the migration from Microsoft DNA (ASP/COM/DCOM) to a J2EE platform. Built presentation and business tiers (JSP/Servlets, EJB, RMI), integrated legacy/partner systems (JMS, MQSeries, XML, AS400), and customized third-party products. Led a key initiative enabling secure B2B e-commerce between Vodafone and Chase Manhattan via the Metiom e-procurement system. Contributed to build/release automation and scripting, database procedures, and cross-team collaboration with business stakeholders. **Tech:** Java, JSP/Servlets, EJB, RMI, JMS/MQSeries, XML, Oracle/PL-SQL, WebLogic 7 / WebLogic Integrator, WebSphere 3.5, ASP/COM/DCOM, AS400, Ant, CVS, Bash/Korn shell.

Web Developer | Custom eCommerce Web Apps (Redweb UK)**Aug 1999 - Mar 2000**

Personally developed at least 10 data driven web sites from a set of graphics and a functional specification. **Tech:** Active Server Pages, HTML, CSS, JavaScript, cross-browser DHTML, MS Access, Flash and Adobe Photoshop

Education & Professional Certifications

2025	Secure Code Warrior (angular and spring boot)
June 2008	Oracle PL/SQL Developer Certified Associate (89%)
June 2007	Sun Certified Programmer for Java 5 Platform (91%)
May 2004	Sun Certified Web Component Developer for J2EE Platform (94%)
July 2002	Sun Certified Developer for Java 2 Platform (100%)
August 2001	IBM Certified Specialist – WebSphere Application Server V3.5
April 2001	Sun Certified Programmer for Java 2 Platform
1995-1999	BSc (Hons.) Computing & Informatics – 2:1 (University of Plymouth)
1990-1994	4 A-levels and 9 GCSE's

Excellent References Available on Request