

VIVEK KUMAR

Senior Full Stack Developer | Technical Lead

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PROFESSIONAL SUMMARY

Senior Full Stack Developer and Technical Lead with 14+ years of experience building web applications, REST APIs, and backend services with Java, Spring Boot, and React.js / AngularJS / Vue.js across the airline, media, and publishing domains. Currently leads a team of 7+ developers and QA engineers at Coforge on the Emirates ResConnect agent booking platform: decomposing a monolith into microservices, building an API gateway with centralised JWT validation, and delivering event-driven integrations on Kafka and Solace. Hands-on across the stack — data modelling (Oracle, MySQL, Couchbase), backend services, front-end modules, CI/CD, and security (VAPT) remediation — with experience mentoring engineers and running design and code reviews.

TECHNICAL SKILLS

Languages	Java 17, JavaScript, Python, Elixir, SQL, XML / XSLT / XPath, PHP
Backend	Spring Boot, Spring Cloud Gateway, Spring Security, Spring MVC, Hibernate, Struts 2, REST APIs, Microservices, Phoenix LiveView, FastAPI
Frontend	React.js, AngularJS, Vue.js, Quasar, Webpack, Module Federation, Bootstrap, HTML, CSS
Messaging	Apache Kafka, Solace PubSub+
Databases & Search	Oracle, MySQL, MS SQL Server, PostgreSQL, Couchbase, Redis, Apache Solr
Cloud & DevOps	Azure AD, Azure Blob Storage, OCI, Docker, Docker Compose, Kubernetes, Jenkins, CI/CD, Git
Architecture	Microservices, Micro-frontends, Event-Driven Architecture, Distributed Systems, Domain-Driven Design, API Gateway, Sidecar Pattern
Security	RBAC, JWT / Token-based Authentication, Azure AD, VAPT / Penetration-Test Remediation
AI & Automation	LLM / GenAI integration, RAG, Agentic Workflows, AI-assisted dev tooling, Selenium, HTMLUnit
Practices	Technical Leadership, Mentoring, Design & Code Reviews, System Design, Agile / Scrum

PROFESSIONAL EXPERIENCE

Sr. Full Stack Technology Specialist Lead

Aug 2022 – Present

Coforge, Greater Noida, India | Clients: Emirates, Dnata Travel | Promoted from Sr. Full Stack Technology Specialist

- Lead a team of 7+ developers and QA engineers on the ResConnect airline agent booking platform (Emirates), covering design, architecture, hands-on development, code reviews, and delivery.
- Decomposing the ResConnect monolith into independently deployable microservices; designed and built the Booking and Ancillary (Bags) services end to end — Java 17 / Spring Boot REST APIs, Oracle and Couchbase data layer, React.js / AngularJS UI.
- Built the API gateway and centralised token-validation service (Spring Cloud Gateway, Sidecar pattern on Kubernetes) that validates Azure AD JWTs for all services and removes duplicated auth logic.
- Migrated SOAP-based TIBCO integrations to a dedicated REST microservice (Wasola) using a feature-flag rollout with no production impact; the migration was formally recognised by the client.
- Implemented event-driven screen-recording control with Kafka and Solace PubSub+ that pauses recording during payment entry to support PCI compliance.
- Designed role-based access control (role-location-permission) in Couchbase and built the React.js admin UI backed by Spring Boot REST APIs.
- Built a micro-frontend proof of concept with Webpack Module Federation, integrating React modules into the AngularJS host for independent UI releases.
- Currently building image offload for Dnata Travel: migrating SQL Server BLOB images to Azure Blob Storage behind a REST API with a flag-based zero-downtime cutover (in progress).
- Remediated VAPT / penetration-test findings; mentor engineers through design and code reviews; introduced AI tooling for unit-test generation and legacy-code comprehension.

Technologies: Java 17, Spring Boot, Spring Cloud Gateway, Spring Security, Apache Kafka, Solace PubSub+, Oracle, Couchbase, React.js, AngularJS, Webpack, Azure AD, Azure Blob Storage, Kubernetes, Docker, Jenkins, CI/CD

Sr. Full Stack Software Engineer

Sep 2010 – Aug 2022

Hindustan Times | Promoted from Software Engineer

- Designed and delivered content publishing platforms for multiple publications — database design, backend services, and Apache Solr search supporting millions of articles and images.
- Built REST APIs and backend services with Spring, Struts 2, and Hibernate; designed Solr indexing strategies and query optimisation for high-volume news content.
- Developed a content-aggregation platform (Selenium, HTMLUnit) crawling 200+ sources, with ingestion, transformation, and FTP / RSS delivery pipelines and a Vue.js / Quasar configuration UI.
- Built the NewZZa mobile content backend (Spring MVC, Hibernate, Solr) serving articles and media to iOS and Android apps.
- Built and maintained CMS web interfaces in Vue.js and AngularJS; tuned MySQL queries and indexes for high-volume transactional processing.
- Led a small team, owning code quality, system stability, and on-time delivery across multiple concurrent projects.

Technologies: Java, Spring, Spring Boot, Struts 2, Hibernate, MySQL, Apache Solr, Selenium, HTMLUnit, Vue.js, Quasar, AngularJS, RSS, FTP

Executive – R&D

Jun 2007 – Jul 2010

Thomson Digital, Thomson Press (India) Ltd.

- Built XML-driven publishing automation with the Adobe InDesign JavaScript SDK, automating 80–90% of page typesetting for publishers including Elsevier and Pearson.
- Developed XML transformation pipelines (Java, XSLT, XPath) for publisher-specific DTDs and QA automation scripts for XML validation and content-quality checks.

Technologies: Java, XML, XSLT, XPath, Adobe InDesign JavaScript SDK

EDUCATION

B.Sc. in Computer Science (3 Yrs.) — Sikkim Manipal University

Diploma in Information Technology (3 Yrs.) — Board of Technical Education, Uttar Pradesh

KEY PROJECTS

ResCONNECT AIRLINE PLATFORM (COFORGE / EMIRATES) | SR. FULL STACK TECHNOLOGY SPECIALIST LEAD

Microservices Transformation — Booking & Ancillary

2024 – 2026

Incremental decomposition of the legacy ResConnect monolith into independently deployable microservices across four active modules, with hands-on full-stack implementation.

- Ancillary Services (Bags): end-to-end UI and backend delivery in Java 17 / Spring Boot with an Oracle and Couchbase data layer.
- TIBCO to Wasola migration: extracted SOAP-based transformation logic into a dedicated REST microservice, enabling monolith removal without a big-bang rewrite.
- Monolith modularisation (Jan 2024 – Aug 2024): split the codebase into independent frontend and backend repositories while retaining a single deployable as the migration foundation; targeted query and throughput improvements across Oracle and Couchbase.

Technologies: Java 17, Spring Boot, React.js, AngularJS, Oracle, Couchbase, Solace, REST APIs

Centralised Token Validation — API Gateway & Sidecar Pattern

2024 – 2025

Centralised access-token validation for all microservices through the Sidecar pattern, replacing duplicated auth logic with consistent enforcement.

- Spring Cloud Gateway filter chain intercepting every inbound request and validating JWTs against the Azure AD JWKS endpoint.
- Sidecar deployed per Kubernetes pod: valid tokens propagate to the application container; invalid tokens return 401 without an upstream call.
- Claims extraction and role enforcement through Spring Security (SecurityContextHolder), integrated with Azure AD via Spring Cloud Azure.

Technologies: Java 17, Spring Cloud Gateway, Spring Security, Azure AD, JWT, Kubernetes

Micro-frontend Proof of Concept — Module Federation

May 2024 – Aug 2024

Proof of concept converting the agent booking UI into independently releasable micro-frontend modules within the existing AngularJS host.

- Implemented Webpack Module Federation to expose React feature modules consumed by the AngularJS shell application.
- Demonstrated independent build, deploy, and versioning per UI domain without disrupting the host application.

Technologies: React.js, AngularJS, Webpack, Module Federation

Access Management — RBAC Admin UI

Jan 2024 – Aug 2024

Role-based access control with role-location-permission mapping in Couchbase and a React.js admin interface.

- Designed the Couchbase document schema for role, location, and permission hierarchies supporting multi-location airline workflows.
- Built the React.js admin UI for managing roles and permissions, backed by Spring Boot REST APIs.

Technologies: Spring Boot, React.js, Couchbase, RBAC

SQL Server to Azure Blob Storage Image Migration (Dnata Travel)

Jun 2026 – Present

In progress

Zero-downtime migration of image assets from SQL Server BLOB columns to Azure Blob Storage with dual-read compatibility during cutover.

- Designed a source_flag-based pipeline: legacy rows are read from SQL Server while new writes go directly to Azure Blob Storage.
- Built a REST API exposing SAS URL-based image retrieval that serves both legacy and migrated images transparently.
- Both stores run in parallel until validation passes, after which legacy reads are retired.

Technologies: Azure Blob Storage, SAS URLs, MS SQL Server, REST API

CONTENT PLATFORMS (HINDUSTAN TIMES) | SR. FULL STACK SOFTWARE ENGINEER

Auto Crawling & Scraping Platform

2017 – 2021

Content automation platform: define scraping rules, crawl 200+ sources, template articles, and deliver through FTP and RSS in one workflow.

- Configuration UI (Vue.js / Quasar / Spring Boot) for per-site CSS selector and XPath rules.
- Crawling and scraping engine using Selenium and HTMLUnit for dynamic and static sites; article templating with automated FTP and RSS delivery.

Technologies: Java, Spring Boot, Vue.js, Quasar, Selenium, HTMLUnit, FTP, RSS

NMS — RSS Delivery & Splitter

Mar 2016 – Jul 2016

Configuration-driven RSS delivery for external clients (Basic-Auth endpoints, dynamic feeds) and a Spring Boot console application that parses and splits feeds into per-category scheduled feeds with per-feed limits.

Technologies: Vue.js, Quasar, Spring Boot, JDOM, Scheduler, RSS

NewZZa — Mobile Content Backend

Feb 2015 – Dec 2015

REST backend serving articles and media to iOS and Android apps, with Solr-indexed content retrieval and category filtering.

Technologies: Spring MVC, Hibernate, Apache Solr, MySQL

HTS Portal — Content & Search Platform

2012 – 2014

Content platform managing millions of articles and images across multiple publications, with FTP ingestion and Solr search.

- Spring / Struts 2 / Hibernate application with a Bootstrap web interface; FTP ingestion pipeline storing articles and images with structured metadata.
- Solr indexing with custom filtering and query optimisation; MySQL query and index tuning for high-volume content processing.

Technologies: Java, Spring, Struts 2, Hibernate, MySQL, Apache Solr, Bootstrap, FTP

INDEPENDENT PROJECTS

QuoteAssist — AI-Assisted Lead-to-Quote Platform

Jun 2026 – Present

Independent project (in progress) | quoteassist.mytechbytes.in

Multi-tenant platform that ingests travel quote requests from Outlook and web forms, extracts structured fields with an LLM (per-field confidence scores), checks them against corporate policy rules via RAG, and drafts email replies for agent review.

- Multi-channel ingestion — Outlook add-in (MS Graph API), Phoenix LiveView web forms, and webhooks — normalised through one Elixir / OTP pipeline with Oban background jobs.
- LLM extraction with confidence gating: low-confidence fields are routed for human review; RAG-based checks for fare class, supplier mandates, and budget thresholds.
- Feedback loop capturing agent corrections to improve extraction and graduate trusted patterns to auto-send, with a kill-switch on confidence drop.
- Deployed on OCI (Ubuntu 24.04, Docker Compose, Caddy) with Jenkins CI and OCIR.

Technologies: Elixir, Phoenix LiveView, OTP, Oban, Python, FastAPI, PostgreSQL, React, MS Graph API, LLM, RAG, Docker, Jenkins, OCI

Centralised Kiosk Display & Ad Management

Independent / client project: scheduled advertisement display on Linux-based kiosks with an ad wallet (debit on successful play, refund on failure); deployed at Rajasthan bus terminals and shopping malls.

Technologies: Vue.js, PHP, Laravel, MySQL, Redis