Rushikesh Hulage

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Summary

Software Engineer with 3 years of experience in Platform Engineering, Cloud Security, and AI-driven application development. Expertise in AWS, Java, Python, LLMs, and scalable enterprise systems, with a strong track record of delivering secure, high-performance solutions across cloud infrastructure and AI platforms.

Experience

Software Engineer – Customer Identity & Access Management, Telstra, Pune — July 2023 – Present

- Build and operate cloud-native identity microservices in Java and Spring Boot powering customer registration, sign-in, passcode verification, credential recovery, and account security across Telstra's digital channels
- Design secure REST APIs to OAuth2, OpenID Connect, and JWT standards, implementing token validation, introspection and exchange, session management, and MFA flows for customer authentication journeys
- Integrate identity services with PingFederate, Salesforce, and Entra ID to deliver SSO, identity federation, and token-based access for downstream enterprise applications
- Owned identity-platform readiness for the migration from legacy WAF to AWS CloudFront + AWS WAFv2, covering authentication-flow validation, traffic and rule analysis, mTLS and certificate transitions, and production verification across phased customer traffic cutovers
- Re-platformed 15+ enterprise applications from PCF to OpenShift with zero authentication downtime, rebuilding auth integration, secure routing, and IP allow-listing
- Drive platform modernization across identity services through Java and Spring Boot upgrades, dependency remediation, and technical-debt reduction
- Diagnose production authentication and authorization incidents using Splunk-based observability and root-cause analysis, closing them out with monitoring and reliability improvements
- Advance DevSecOps practice through CI/CD pipeline automation, automated testing, vulnerability remediation, and secrets management

Education

Veermata Jijabai Technological Institute, Mumbai, B.Tech in EXTC — Aug 2019 – May 2023

Projects

Atlas – Agentic RAG Platform | Python, FastAPI, Qdrant | GitHub | Live Demo

- Built and deployed an agentic RAG platform that cites the passage behind every sentence and grades its own answer: 0.99 groundedness, 0.77 answer correctness on 16 labelled questions
- Designed hybrid retrieval (Qdrant dense vectors + BM25, Reciprocal Rank Fusion, cross-encoder rerank) with a bounded router → grader → retry graph; finds every labelled page (recall 1.00) at 7.4 s median latency
- Built the evaluation harness first (five metrics, significance-tested A/B, cost and latency gates); it reverted a "bug fix" that cut recall 0.94 → 0.88 and rejected HyDE for +56% slow-case latency
- Rs. 0 idle and about Rs. 0.20 a question on scale-to-zero Cloud Run, with a daily spend cap checked before every paid call; 892 tests, 90% coverage floor in CI

VisionTrack – Tracking Study | NumPy, C++ | PyPI | Live Demo

- Built a multi-object tracker from first principles in NumPy – 8-state Kalman filter, Hungarian solver, ByteTrack two-stage association – with HOTA and IDF1 matching the trackeval reference to within 1.4e-3
- Ran a significance-tested study on MOT17 and DanceTrack: deep re-ID cuts ID switches; a learned motion model predicts 12.5% better on non-linear motion but hurts tracking, published as a negative result
- Shipped a parity-gated C++ port, 21–69x faster and verified bit for bit against the NumPy reference; both packages on PyPI with 1,000+ automated tests and CI

Sextant – MCP Document Search | Python, MCP, ONNX | PyPI

- MCP server listed in the official MCP registry: hybrid search with reranking puts the right passage first 93% of the time (87% plain search), beats the BM25 + cross-encoder baseline on three BEIR sets, reads scanned PDFs; 1,000+ tests

Skills

Languages: Java, Python, SQL, Bash, C++

Backend & Frameworks: Spring Boot, Spring Security, Spring MVC, Spring Batch, Hibernate, JPA, RESTful APIs, JUnit, Mockito, Maven, FastAPI, async Python, Pydantic

Identity & Application Security: OAuth2, OIDC, SAML, JWT/JWKS, SSO/SLO, PingFederate, SecureAuth, API gateway policy (OGW/OKAPI), AWS WAFv2, OWASP Top 10, mTLS, CORS, RBAC, IP allow-listing

Cloud & DevOps: AWS (CloudFront, Route 53, S3, IAM, Lambda, CloudWatch, Athena, Cost & Usage Report), OpenShift, Kubernetes, Docker, PCF, CI/CD, Git, GitHub Actions

AI/ML: LLMs, RAG (hybrid retrieval, BM25, RRF, cross-encoder reranking), agentic orchestration, LangChain, LangGraph, vector databases (Qdrant, FAISS), embeddings, evaluation harnesses, PyTorch, Hugging Face Transformers, ONNX, OpenCV, NumPy, scikit-learn

Certifications

- Machine Learning by Stanford University (Coursera)
- Deep Learning Specialization (deeplearning.ai / Coursera)