Akshat Mishra

New Delhi, India | +91 9599318801 | akshatm.work23@gmail.com | linkedin.com/in/akshat-mishra-9967b9108 | github.com/froxily

Professional Summary

Computer Science and Engineering undergraduate (B.Tech, 2027) with two software internships, seeking backend and full-stack roles. Shipped three CI-tested applications in Java/Spring Boot, Python/FastAPI, PostgreSQL and React/TypeScript, with concurrency-safe transactions and OAuth 2.0/OIDC security. English C2; Japanese JLPT N3 level.

Education

Bennett University — **Greater Noida, India**
B.Tech in Computer Science and Engineering — *2023 – 2027 (expected)*
Coursework: Data Structures, Algorithms, Object-Oriented Programming, DBMS, Operating Systems, Computer Networks

St Thomas School — **Ghaziabad, Uttar Pradesh, India**
CBSE Board

Experience

Ornate TechnoServices Pvt. Ltd. — **Jan 2026 – Feb 2026**
Software Development Intern — *Greater Noida, India (on-site)*

- Implemented backend, frontend and data-management tasks in Java/Spring Boot, React and MySQL for an in-development government-related research portal that stores and searches scientists' profiles and research records.
- Worked in a five-person team using Git/GitHub and daily stand-ups; changes were merged into the team codebase.

Medelan Life Sciences Pvt. Ltd. — **Jun 2025 – Jul 2025**
Web Development Intern — *Ghaziabad, India (hybrid)*

- Built pages for the company website in React, JavaScript, HTML and CSS with one other developer, some independently.
- Designed page layouts in Figma and refined them through regular review feedback; managed changes with Git/GitHub.

Projects

Yoyū | *Java 21, Spring Boot, Spring Security, PostgreSQL, React, TypeScript, Docker, Azure* — Live app

- Built and deployed a bilingual (English/Japanese) PWA that helps international students in Japan stay within the 28-hour/7-day work limit across multiple part-time jobs, with on-device schedule import (PDF.js, Tesseract.js OCR).
- Designed a Spring Boot REST API (42 endpoints) around a framework-free Java compliance engine that evaluates every rolling 7-day window, overnight shifts and vacation-period limits; imported batches save atomically (all rows or none).
- Enforced data integrity in PostgreSQL across 10 Flyway migrations: a GiST exclusion constraint rejects overlapping shifts, while per-user row locks, optimistic locking and idempotency keys keep concurrent and retried writes consistent.
- Implemented Google and LINE sign-in with Spring Security (OAuth 2.0/OpenID Connect, PKCE), HMAC-hashed email codes, CSRF protection and rate limiting; 511 backend (JUnit 5, Testcontainers) and 537 frontend (Vitest) tests pass in CI.

Kensa | *Python, FastAPI, PostgreSQL/pgvector, LangGraph, Ollama, React, TypeScript* — Live replay GitHub

- Built a local-first investigator for failed GitHub Actions runs: a FastAPI backend retrieves evidence with hybrid full-text/vector search (pgvector), and a local Qwen3 model served by Ollama drafts a diagnosis that must cite log lines.
- Made model output checkable: each citation is verified deterministically against stored evidence (all 646 accepted citations genuine on a held-out synthetic set); proposed fixes need human approval and are never applied automatically.
- Engineered crash-resumable LangGraph workflows on a PostgreSQL job queue (`FOR UPDATE SKIP LOCKED`, leases, fencing tokens, retries with backoff), backed by 31 tables and 15 reversible Alembic migrations.
- Added incremental CI-history ETL, flaky-test analysis and OpenTelemetry tracing; 666 backend (pytest), 83 frontend (Vitest) and 30 end-to-end (Playwright) tests pass in CI. The public demo is a static prerecorded replay, not a hosted AI backend.

Kaidoku | *Java 21, Spring Boot, Kuromoji, JavaScript, IndexedDB, Docker, Azure Container Apps* — Live app GitHub

- Built and deployed an installable, offline-capable Japanese-learning PWA that detects 341 JLPT N5–N3 grammar patterns in any text and teaches 640 kanji and 2,963 words through 2,926 validated reading questions with spaced repetition.
- Designed a deterministic rule engine (no ML) on Kuromoji morphological tokens: BitSet-based NFA-style matching without backtracking, bounded gaps and candidate indexing; about 13 ms to match 10,000 characters (local benchmark).
- Measured 99.2% precision / 98.9% recall on a 655-sentence regression set (199 core rules, 0.98 floor enforced in CI) and 99.1% / 94.4% on the first run of a 1,443-sentence held-out set (142 newer rules).
- Added transactional IndexedDB progress with backup/restore and versioned service-worker caches; GitHub Actions builds the Docker image run on Azure Container Apps, with 3,374 unit/integration and 78 Playwright browser tests passing.

Technical Skills

Programming Languages: Java, Python, TypeScript, JavaScript, SQL
Backend: Spring Boot, Spring Security, Spring MVC, JPA/Hibernate, FastAPI, SQLAlchemy, REST APIs, OAuth 2.0/OIDC
Databases: PostgreSQL, MySQL, pgvector, Flyway, Alembic, data modeling, transactions and concurrency control
Frontend: React, Vite, HTML, CSS, Progressive Web Apps (service workers, IndexedDB)
DevOps and Cloud: Docker, Docker Compose, GitHub Actions (CI/CD), Azure (App Service, Container Apps), Git, Linux
Testing and Observability: JUnit 5, MockMvc, Testcontainers, pytest, Vitest, Playwright, OpenTelemetry
AI Engineering: LangGraph, Ollama (local LLMs), retrieval-augmented generation (RAG), Kuromoji (Japanese NLP)
Competitive Programming: CodeChef 2063, AtCoder 1159, LeetCode 125+ problems
Spoken Languages: English (C2, EF SET 71/100), Japanese (JLPT N3 level)

Certifications

Algorithmic Toolbox (UC San Diego), *Mar 18, 2025* • Databases and SQL for Data Science with Python (IBM), *Nov 8, 2024*
Claude with the Anthropic API, *Jun 14, 2026* • JavaScript (HackerRank), *Jan 12, 2026*
EF SET English Certificate (C2), *Dec 18, 2025*
Getting Started with Accelerated Computing in Modern CUDA C++ (NVIDIA), *Nov 20, 2025*
Goldman Sachs Software Engineering Virtual Experience Program (Forage job simulation), *Aug 13, 2023*