Abhijit Panchal

Software Development Engineer - Full Stack

+91-7999173541 | abhijitpanchal.in | sabhijit.panchal2406@gmail.com | abhijit-panchal | Mumbai

SUMMARY

Full stack software engineer with a **B.Tech in Computer Science** and **3.5+ years** building **service-oriented web applications** for banks and capital-markets firms. Strong in **object-oriented programming** (Javascript, Java, Python), **data structures and algorithms**, and **API design**; builds record-matching and batch pipelines over **100,000+** rows per run and search systems over **25M+** records. Designs **responsive, data-dense interfaces** from **reusable component systems**, and has shipped on **small, highly collaborative teams** spread across **India, South Korea, and Brazil** where **confidentiality and integrity of financial data** are hard requirements.

TECHNICAL SKILLS

Languages (OOP): C#, Java, Python, TypeScript, JavaScript (ES6+), SQL
CS Fundamentals: Data structures & algorithms, object-oriented design, design patterns, system design
Backend & Services: .NET (C#), FastAPI, Django, Node.js, Express.js, REST APIs, service-oriented architecture, microservices
Frontend & Data Viz: React.js, Next.js, Redux, AG Grid, Vite.js, Tailwind CSS, interactive dashboards, responsive design, reusable component libraries, UI/UX design
Data at Scale: PostgreSQL, MySQL, MongoDB, Elasticsearch, Redis caching, schema design, indexing, query optimization
Infrastructure & Automation: AWS (EC2, RDS, S3, VPC, Cognito), Docker, CI/CD, GitHub Actions, Celery, cron, Git
Security: OAuth 2.0, JWT, RBAC, AES encryption, maker-checker controls
Domain: Payments & financial messaging (SWIFT MT/MX, ISO 15022/20022), securities settlement, bank reconciliation, billing

PROFESSIONAL EXPERIENCE

Full Stack Software Engineer — **Dec 2024 – Present**
Oneture Technologies — *Mumbai, India*

CMS - Reconciliation Platform for Banks, UBI Bank (Current Project)

Python, PostgreSQL, Excel, binary file parsing

- Building a **bank reconciliation** platform for **UBI Bank** whose **matching logic** pairs transaction records across three independent sources (ATM switch, ATM electronic journals, core banking system) and flags every mismatch across **lakhs (100,000+)** of rows.
- Wrote **Python parsers** that decode UBI's **binary-format machine files** into structured records, turning raw data into input that can be matched and audited at scale.
- Maintain the **multi-source ingestion pipeline** (switch files, EJ, CBS) and keep each format handler working as upstream files change, then **load results into the database** and produce formatted Excel output for operations.
- Platform is planned for rollout to **Yes Bank and other banks**, so ingestion and matching are being built to be reused rather than tied to one bank.

CMS - Enterprise Billing Platform for Banks (Cash Management & Cash Van Services)

Python, FastAPI, Celery, PostgreSQL, React, Vite

- Billing platform that calculates what each bank owes every month for cash management and **cash van** services, issues the invoice, and evidences every line; replaced a spreadsheet-and-email process.
- **Automated the month-end workflow** with **Celery workers and Python cron jobs**: runs that took **3 days** of manual effort now finish unattended in **under 20 minutes**, with retries and idempotency so a re-run never double-bills. Generates **4,000+ invoices per cycle** for banks including **Axis Bank and SBI** across **12 states**.

- Designed a **configuration-driven, multi-tenant rate engine** (object-oriented rate-card, SLA, and deduction models) so a new bank, state, or provider is onboarded through configuration rather than code, and SLA penalties post as auditable line items.
- Exposed the engine through **FastAPI REST services** over multi-tenant **PostgreSQL** schemas (rate plans, invoices, deductions, payments), with APIs responding in **under 1 second**.
- **Designed the complete application UI** (information architecture, screen flows, **reusable component system**) and built **40+** responsive screens across Operations, Finance, and Admin modules, with **maker-checker** approval enforced via **JWT and RBAC**.

Mirae Asset - Bond Custodian Platform, Capital Markets (South Korea & Brazil)

React, Redux, AG Grid, C#/.NET, SWIFT MT/MX

- Delivered a **bond custodian platform** (safekeeps bonds for investors and settles their trades) on a **small, cross-functional team** of developers, analysts, testers, and architects across **3 countries**.
- Built **object-oriented C#/.NET REST services** implementing **SWIFT MT and MX** messaging so transaction records met **regulatory reporting obligations** in Brazil and South Korea, supporting **millions of BRL** in daily settlements.
- Built **33+** responsive, **data-dense interactive screens** in React.js, Redux, and AG Grid for settlements, securities, corporate actions, and reconciliation; migrated the build from CRA to **Vite.js**.
- Ran **requirement analysis and solution design** with clients, producing specifications, flowcharts, and API contracts, and enforced **confidentiality and integrity of financial data** through JWT, RBAC scoping, and encryption.

Frontend Engineer **Jul 2023 – Sep 2024**

Taiyo.AI - B2B SaaS, Infrastructure Intelligence *San Francisco, USA (Remote)*

- Scaled an analytics platform serving **50+** enterprise clients over a **25M+**-record dataset, cutting insight generation from **4 hours to 3 minutes**.
- Diagnosed **Elasticsearch** query bottlenecks and designed **multi-tier caching**, reducing API latency from **5s to 0.8s** and infrastructure spend by **$3,200/month**.
- Built a Gen-AI news module on OpenAI streaming APIs for **100+** users, cutting token costs **45%**; **A/B-tested** prompt variants lowered hallucination rate from **12% to 7.8%**.

Frontend Developer **Oct 2022 – Apr 2023**

My Next Film - Content-Driven Web Platform *Delhi, India (Remote)*

- Built full stack features with React.js, Python, and **Django REST APIs**; cut homepage load from **4.2s to 3.1s**, lifting 30-day retention **15%**.
- Cleared **60+** Jira defects across **3 sprints**, eliminating **80%** of the backlog and unblocking a delayed launch.

PROJECTS

Aster - AI-Powered Project Management Platform github.com/abhijitsp11

Next.js, TypeScript, Node.js, Express, Prisma, PostgreSQL, AWS (Cognito, RDS, EC2, VPC), Groq

- Full stack web application with **real-time data dashboards** and a Groq-backed assistant that converts natural-language questions to SQL at **92%** accuracy.
- Provisioned production **AWS infrastructure** (VPC, EC2, RDS, Cognito) with RBAC, sustaining **99.9%** uptime.

EDUCATION

Avantika University **Jun 2019 – May 2023**

B.Tech, Computer Science & Engineering *Ujjain, India*

KEY ACHIEVEMENTS

- **Nominated for Team of the Year** at Oneture as part of a **4-developer** Mirae Asset team.
- Drove an **84%** API latency cut at Taiyo.AI and a **26%** page-speed gain at My Next Film.