

# Shubham Patel

shubhamcp23@gmail.com | +91-6355411809 | Ahmedabad, IN | [github.com/ShubhamPatel2305](https://github.com/ShubhamPatel2305) | [linkedin.com/in/shubham-patel](https://linkedin.com/in/shubham-patel)

## SUMMARY

Software Developer building production backend, LLM, and multi-cloud systems. 1.5+ years full-time at Iolite Softwares; 2 years part-time during B.Tech. B.Tech CS, GPA 9.21/10. Open to SDE roles at product-led companies.

## EDUCATION

**Pandit Deendayal Energy University**  
B.Tech, Computer Science – GPA: 9.21 / 10

Gandhinagar, Gujarat  
July 2021 – May 2025

## EXPERIENCE

### Iolite Softwares

Software Developer

January 2025 – Present

- **Agentic NL-to-SQL Chatbot** — [\[GitHub\]](#) | [\[Live\]](#): Architected a multi-tenant agentic NL-to-SQL chatbot on **LangGraph** with locally-served **Gemma**, a 3-tier follow-up engine, destructive-SQL gate, and binary-encoded RBAC whitelist across **50+ modules** – cut follow-up LLM calls by **~60%**.
- **FastSQLDatabase + RAG Retrieval**: Built a custom **FastSQLDatabase** wrapper with cached **INFORMATION\_SCHEMA** snapshots and multi-tier **TTL+LRU** caches; added RAG few-shot retrieval with hybrid embedding + lexical fallback – reduced tenant cold-start latency by **~70%**.
- **Hybrid Distributed Caching**: Built ETag-based hybrid HTTP caching with **IMemoryCache** and **Microsoft Garnet** on an **ASP.NET / C# / Angular 17** stack – **~70%** DB-load reduction and **~60%** faster responses.
- **Trademark Automation at Scale**: Shipped scrapers for **200+** trademark offices with custom CAPTCHA-solving models and PDF/image+text similarity pipelines (**ResNet, CLIP, RapidFuzz**) across **250+** regional journals.

### TTFA Academy

Software Developer (Part-Time, during B.Tech)

January 2023 – December 2024

- **Multi-Cloud Active-Passive DR** — [\[GitHub\]](#): Designed DR topology with **Cloudflare** routing primary traffic to **AWS Mumbai**, hot-standby **AWS Singapore**, and **Azure** failover on **MongoDB Atlas**; built canary fallback (**5% → 100%** stepped ramp) gated on multi-tier health checks for automated cutover. **Terraform + Jenkins** drill pipeline.
- **Adaptive Video Streaming Pipeline**: Built end-to-end HLS pipeline – **SQS**-dispatched ephemeral **EC2** workers running Dockerized **FFmpeg** transcoders, multi-bitrate (**1080p/720p/360p**) chunks served via CDN with a custom HTML5 ABR player to **1000+** students.
- **CRM with Lead Attribution and EMI Automation**: Built CRM with **Meta Leads + LinkedIn Graph** webhook ingestion, server-side **Meta Conversions API** (recovering iOS 14+ ATT attribution), and an in-house EMI engine – cut lead-response time by **~80%**.

## PROJECTS

### TeamSync – Collaborative Project Management Platform

[Live](#) | [Repo](#)

Infosys Springboard 5.0 – Backend & Integration Lead

- **Full-Stack Collaboration Platform**: Led backend and integrations on a project management platform with role-based access, task tracking, and team workflows. Stack: **Node.js, Express, React, MongoDB**.

## SKILLS

**Languages**: Python, TypeScript, JavaScript, C#, C++, SQL

**Backend & AI/LLMs**: FastAPI, Node.js, ASP.NET Web API, REST APIs, LangGraph, LangChain, RAG, OpenAI / Anthropic APIs

**Cloud & DevOps**: AWS, Cloudflare, Docker, Terraform, Jenkins, multi-cloud DR, canary deployments, CI/CD

**Databases & Frontend**: PostgreSQL, MongoDB, Redis, SQL Server; React, Next.js, Angular, Tailwind CSS

## ACHIEVEMENTS

**Rank #7 / 150** – [HackThisFall 3.0](#), Feb 2023 | **Top 10** – SBSSU Hackathon, Punjab, Mar 2023