

Soham Pal

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GitHub | LinkedIn | Portfolio

Summary

Computer Science undergraduate (AI ML) skilled in **Python, Django, Django REST Framework** and modern JS. Built and maintained **scalable services**, designed RESTful APIs, and integrated **third-party APIs** with robust testing and CI. Comfortable collaborating across frontend (**Vue.js/React**) and backend, with a focus on reliability, performance, and clean code.

Technical Skills

Languages: Python, JavaScript, Java, Kotlin

Frameworks: Django, Django REST Framework, Vue.js (working), React.js

Databases: PostgreSQL, MySQL, MongoDB

DevTools: Git/GitHub, Docker, Postman, CI/CD (GitHub Actions), PyTest, Cypress/Selenium

Concepts: REST API design, auth (JWT/OAuth2), caching, rate limiting, pagination, webhooks, logging/metrics

Selected Experience Projects

Backend Developer — Healthcare Management System 2025 College/Team Project React, Django, DRF, PostgreSQL

- Built **REST APIs** (patients, tests, notifications) with **Django REST Framework**; implemented auth, pagination, filtering, and validation.
- Integrated **OpenELIS** server APIs for secure data exchange; added idempotent retries and request signing for reliability.
- Designed normalized schema and indexed hot paths, improving API P95 latency by **35%** (profiling with Django Debug Toolbar).
- Wrote unit/integration tests (PyTest + DRF test client); containerized services with **Docker**.

Real-time AI Code Collaborator — Backend 2025 Team Project Node.js, WebSockets, RBAC, MongoDB

- Implemented session APIs, **role-based access control**, and document persistence; added rate limiting and server-side telemetry.
- Optimized broadcast fan-out and persistence to reduce tail latency under concurrent edits.

Drag-and-Drop File Organizer (Virtual Desktop) 2024–2025 Personal Project MERN, HTML5 APIs

- Exposed REST endpoints for file metadata and folders; implemented signed-URL style access and background jobs for previews.
- Built frontend interactions; can translate patterns to **Vue.js** as needed.

Open Source — Google Summer of Code

2025 Contributor

Testing, CI/CD

- Drove E2E test coverage from **30% to 80%** by writing robust flows for auth, API interactions, and edge cases; enforced checks in CI.

Summer of Bitcoin

2024 Contributor

APIs, Data Integrations

- Integrated blockchain data **APIs**, focusing on correctness, rate limiting, and resilience.

Education

B.Tech in Computer Science (AI ML)

2023–Present Polaris School of Technology

Bangalore, India

Achievements & Certifications

- Google Summer of Code (2025) — Contributor Certificate.
- MERN & Django Web Development Bootcamps.
- College Hackathon (2024) — Top 3.