

KAPIL DAGUR

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· Noida, India

PROFESSIONAL SUMMARY

Results-driven Backend Software Engineer with **3+ years** of experience architecting scalable RESTful APIs, enterprise SaaS platforms and **RBI Account Aggregator** systems using **Python, Django, FastAPI, and Node.js**. Delivered **70% API response time reduction** and **35% production bug reduction** in live environments. Merged **2 commits** into SQLAlchemy (Python's most widely used ORM). Passionate about Agentic AI and Model Context Protocol (MCP) — designing intelligent, tool-augmented systems that bridge LLMs with real-world services.

TECHNICAL SKILLS

Languages	Python, JavaScript, SQL, C/C++, Bash/Shell Scripting
Backend Frameworks	Django, Django REST Framework (DRF), FastAPI, Flask, Django Ninja, Node.js, Express.js
Databases & ORM	PostgreSQL, MySQL, MongoDB, Redis, SQLite, SQLAlchemy, Alembic, Query Optimization
Data Processing	NumPy, Pandas, SciPy, Data Wrangling, Data Cleaning, Exploratory Data Analysis (EDA)
Agentic AI / MCP	Model Context Protocol (MCP), LLM Tool Use, AI Agents, Function Calling, OpenAI API, Anthropic API
DevOps & CI/CD	Docker, Docker Compose, GitHub Actions, Jenkins, GitLab CI, CI/CD Pipelines
Cloud & Messaging	AWS (EC2, S3, RDS), Celery, RabbitMQ, Nginx, Gunicorn, Uvicorn
API & Testing	RESTful APIs, GraphQL, OpenAPI/Swagger, JWT Auth, pytest, unittest, TDD, 85%+ Coverage
Fintech / AA	RBI Account Aggregator (AA), Consent Management, FIU/FIP & TSP Integration, Bank Statement Analysis
Practices	Microservices Architecture, System Design, Agile/Scrum, Code Review, Git Workflow

PROFESSIONAL EXPERIENCE

Software Engineer

SurePass Technologies Pvt. Ltd. · Full-time

Apr 2026 – Present

Delhi, India

- Build backend services for **finpass.ai**, SurePass's Account Aggregator subsidiary, delivering RBI-regulated financial data-sharing flows to NBFC lending clients
- Improved **bank statement analyzer** performance and reduced its running cost through pipeline and query optimization
- Developed the **consent management system** for the Account Aggregator flow — consent creation, approval, revocation and expiry — per the RBI AA framework
- Designed and built a **multi-AA vault system** for secure storage and retrieval of financial information across aggregators
- Integrated **multiple Account Aggregators and TSPs** behind a unified interface, giving different NBFCs uninterrupted Account Aggregator service

Python Backend Developer

In2IT Technologies Pvt. Ltd. · Full-time

Apr 2024 – Apr 2026

Noida, India

- Developed enterprise RESTful APIs for **iProvision** — a network resource management platform with SD-WAN and SNMP monitoring — serving **10,000+ concurrent users** with real-time device configuration and automated alerting; reduced network downtime by **40%**
- Built backend services for **iDashboard** — successor to Apache Superset — featuring live data streaming, customizable chart types (bar, line, pie, heat maps), and OpenAPI-documented APIs enabling seamless third-party integrations
- Engineered backend APIs for **ProWatch** — an enterprise access control and physical security system — integrating hardware device communication, real-time event processing pipelines, and role-based access workflows for enterprise clients
- Optimized API response time **800ms → 250ms (70% improvement)** using Redis caching, Celery async task queues, and PostgreSQL query optimization; scaled concurrent request handling by **3x**
- Implemented CI/CD pipelines with Docker, GitHub Actions, and Jenkins achieving **85%+ code coverage**; reduced production bugs by **35%** and deployment time by **60%**
- Designed containerized microservices using Docker Compose with multi-stage builds; collaborated in Agile/Scrum sprints reducing delivery time by **20%**

Backend Developer (Node.js / Python)

CodeQuotient Pvt. Ltd. · Apprenticeship

Jun 2023 – Dec 2023

Remote

- Developed and optimized RESTful APIs using **Node.js, Express.js, and Django REST Framework**; improved backend throughput by **25%** through async processing, middleware optimization, and response caching
- Implemented database indexing, query optimization, and connection pooling in PostgreSQL reducing average query time by **40%**; integrated ELK stack for monitoring, maintaining **99.5%+ system uptime**
- Established code review workflows and mentored **3 junior developers** on REST API design patterns, clean code principles, and

PERSONAL PROJECTS & OPEN SOURCE

FastAPI Tenancy Framework — Multi-Tenant SaaS Platform | *FastAPI, SQLAlchemy, Alembic, Redis, Docker, JWT*
Jan 2026 – Present github.com/fastapi-extensions/fastapi-tenancy Published on PyPI

- Enterprise-grade multi-tenancy library supporting **4 isolation strategies** (schema-per-tenant, database-per-tenant, RLS, hybrid) with async-first architecture (AsyncSession, contextvars), zero blocking I/O, and auto dialect detection for PostgreSQL, MySQL, SQLite and MSSQL; **95%+ test coverage**

SQLAlchemy — Open Source Contributions | *Python, PostgreSQL, mypy*
github.com/sqlalchemy/sqlalchemy

- **2 merged commits:** raised a clear error for PostgreSQL ENUM/DOMAIN types using a reserved name (555a18ac, PR #12822) and expanded inline PEP 484 type coverage in `sqlalchemy.sql.base` (e47d6526, PR #12707) — merged via SQLAlchemy's Gerrit workflow and released in **2.1.0b1**

EDUCATION

Dr. A.P.J. Abdul Kalam Technical University

Master of Technology (M.Tech), Computer Science & Engineering · CGPA: 8.29/10 · Grade: A+ (Hons)

Sep 2024 – Jul 2026

Ghaziabad, India

Dr. A.P.J. Abdul Kalam Technical University

Bachelor of Technology (B.Tech), Computer Science & Engineering · CGPA: 7.89/10 · Grade: A+

Aug 2020 – Aug 2024

Ghaziabad, India

CERTIFICATIONS & ACHIEVEMENTS

- **HackerRank Certified:** Software Engineer · Software Engineer Intern · SQL (Intermediate) · Problem Solving (Intermediate)
- **IBM:** Python for Data Science · **Cognitive Class:** SQL and Relational Databases 101
- Published a **production-ready PyPI package** (FastAPI Tenancy) with full documentation
- SQLAlchemy open source contributor with **2 merged commits** released in 2.1.0b1
- Achieved **70% API response time reduction** and **35% production bug reduction** through CI/CD automation