

Muhammad Farhan

Software Engineer

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Personal Statement

Experienced Python Backend Engineer with over 7 years of success designing scalable, testable, and modular backend systems using Django rest, Flask, FastApi, Odoo (python based ERP Framework) and modern cloud-native technologies. Proven expertise in building RESTful APIs, microservices, SQL optimisations, and data pipelines for real-time applications across PropTech, Healthcare, and Enterprise SaaS. Strong background in clean code architecture, collaborative agile teams, and delivering production-grade systems with high performance, reliability, and maintainability. Ready to contribute immediately to fast-paced product teams where engineering excellence, impact, and innovation are valued.

Work History

Senior Backend Engineer – [Dalba Group of Companies, Riyadh, Saudi Arabia \(Remote\)](#)
(October 2020 – Present)

Achievements and responsibilities:

- Developed modular Python micro services using Flask and FastAPI (project-based), designed for scalable and distributed deployment with CI/CD pipelines.
- Built microservices for quoting, automated billing, real-time notifications, and document generation using Python.
- Designed and optimised PostgreSQL schemas with complex joins, indexes, and performance tuning for high-volume queries.
- Optimised PostgreSQL databases, improving system stability and query performance by 40%.
- Led CI/CD pipelines using GitHub Actions and Docker for deployments to AWS EC2, cutting deployment issues by 30% and accelerating delivery cycles.
- Collaborated with cross-functional teams including frontend (React), product, and QA using Agile/Scrum workflows.
- Designed secure API endpoints with token-based access control, rate limiting, and audit logging, ensuring privacy and traceability of sensitive records.
- Simulated a blockchain-style tracking module that assigns unique, immutable digital IDs to transaction entries using hash-based integrity checks.
- Applied privacy-first backend design by limiting data exposure via role-based access and encrypted API payloads (OWASP-guided).
- Developed and customised Odoo modules using Python, automating workflows and improving business operations by 20%.
- Integrated RESTful and third-party APIs to enhance inter-system communication and reduce manual processes.
- Refactored legacy Python code for efficiency and maintainability, improving system performance and reducing technical debt.
- Conducted automated unit and integration testing, reducing bugs by 35% and supporting continuous delivery.
- Managed deployments on AWS, Alibaba Cloud, and DigitalOcean, optimising resource usage and reducing server costs.
- Upgraded Odoo versions with full module compatibility and minimal downtime, maintaining system stability.
- Conducted code reviews and mentored junior developers, upholding coding standards and best practices.

Tech Stack: Python, Flask, FastAPI, Pandas, NumPy, Pytest, Odoo(ORM/MVC/XML), JavaScript, PostgreSQL, SQL, REST APIs, GitHub, Git Flow, Docker, Linux, Nginx, CI/CD (GitHubActions, Jenkins), AWS (EC2, S3, API Gateway), DigitalOcean, Alibaba Cloud, Jira, Confluence, Agile/Scrum.

Python Developer – [Napollo Software Design \(Lahore Office\)](#) – Remote for New York HQ, USA

(November 2019 – September 2020)

Achievements and responsibilities:

- Designed and deployed secure backend solutions for EHR, HRMS, and financial systems using Python, improving data processing and compliance.
- Created secure API endpoints and data ingestion pipelines from third-party platforms.
- Created secure API endpoints and data ingestion pipelines from third-party platforms.
- Built internal tooling for data validation and task automation across development teams.
- Developed backend architecture (models, workflows, business logic), enhancing system scalability and performance by 25%.
- Integrated third-party APIs to automate data exchange and extend system capabilities, reducing manual workload.
- Developed custom modules and backend features to automate business logic, resulting in higher system efficiency and reduced manual tasks.
- Built scalable backend infrastructure with robust version control (Git), cutting deployment issues by 30%.
- Implemented unit testing and CI workflows, significantly reducing bugs and improving release quality.
- Managed cloud deployments (AWS, Alibaba Cloud, DigitalOcean), tuning resources for better performance and cost-efficiency.
- Collaborated with cross-functional teams (QA, design, and product owners) to deliver high-quality features on time.
- Delivered projects under tight deadlines, achieving a 4.5/5 satisfaction score from stakeholders.
- Enhanced process automation by developing Odoo modules, improving operational efficiency across departments.

Tech Stack: Python, Flask, Pandas, NumPy, Odoo, JavaScript, PostgreSQL, REST APIs, Git, Docker, Linux, Nginx, AWS, Alibaba Cloud CI/CD.

Software Developer – [Axiom World, Lahore, Pakistan](#)

(March 2018 – Oct 2019)

Achievements and responsibilities:

- Delivered end-to-end backend modules for HR, Sales, Inventory, and Education systems using Python, increasing operational automation.
- Designed and implemented scalable backend architectures and reusable Python modules, reducing repetitive code and accelerating feature delivery.
- Developed custom business logic and integrated third-party APIs, enabling seamless data exchange and improved user functionality.
- Led full project lifecycle from planning to deployment, ensuring timely delivery and alignment with business requirements.
- Standardised code practices and deployment processes, reducing post-release defects and improving long-term maintainability.
- Deployed and optimised cloud-hosted applications on AWS and DigitalOcean, enhancing performance and reducing server costs.
- Managed source code with Git, implementing effective branching strategies (Git Flow) for streamlined collaboration and releases.
- Collaborated with UI/UX designers, QA engineers, and stakeholders to build features that improved user experience and adoption rates.
- Provided Level 2 technical support, increasing system uptime and improving customer satisfaction by 30%.

- Analysed user feedback to refine software functionality and address pain points, contributing to increased platform adoption.

Tech Stack: Python, REST APIs, PostgreSQL, Odoo, Git, AWS, DigitalOcean, Linux, Docker, Agile, Git Flow.

Key Skills

- **Python Programming:** clean, scalable, production-grade code
- **Backend Development:** Python, Django REST, Flask, FastAPI, RESTful APIs, database design
- **System Integration:** third-party APIs, payment gateways, external systems
- **Microservices & Architecture:** Microservices design patterns, service decomposition, and inter service communication.
- **Data Handling:** Pandas, NumPy, JSON, ETL pipelines, CSV processing, API data integration
- **Odoo ERP Development:** custom modules, workflows, reports
- **Database Management:** PostgreSQL & SQL schema design, performance tuning, queries, optimisation, backup/restore
- **Version Control:** Git, GitHub/GitLab workflows, GitHub Actions
- **Cloud & Deployment:** AWS (Lambda, EC2, S3), DigitalOcean, Linux server setup, Nginx
- **Docker & Deployment:** Docker, Kubernetes(Basic), CI/CD pipelines, Jenkins
- **Testing & Quality:** Unit testing(Pytest), code reviews, debugging
- **Troubleshooting & Debugging:** logs, test cases, critical issue resolution
- **Team Support & Mentoring:** code reviews, onboarding junior devs
- **Technical Documentation:** functional specs, user guides, developer notes
- **Agile & Scrum Methodologies:** sprints planning, stand-ups, retrospectives, task estimation, team collaboration

Education

October 2019

BSc (Hons) Software Engineering | [Virtual University of Pakistan](#)

Certifications

Data analysis with python - [IBM](#)

Working with Version Control - [University of Leeds](#)

An Introduction to Cryptography - [University of Leeds](#)

Agile Project Management - [Google](#)

Career Essentials in GitHub Professional Certificate - [Github](#)

Docker Foundation Professional Certificate - [Github](#)

Professional Highlights

- **7+ Years of Hands-on Python Development:** Successfully delivered end-to-end python based business solution applications, including custom module development, backend logic, workflow automation, and third-party integrations across multiple industries (Healthcare, Logistics, Manufacturing).
- **Cross-Functional Team Collaboration:** Worked closely with business analysts, project managers, and stakeholders to translate business needs into scalable technical solutions within Agile environments.
- **Cloud Deployment & DevOps:** Deployed Odoo applications on AWS, DigitalOcean, and Alibaba Cloud, using Docker and CI/CD pipelines (GitHub Actions) for efficient development and delivery.
- **Client-Facing & Support Experience:** Provided technical leadership, client demos, post-go-live training, and ongoing support, earning high satisfaction feedback from clients and end users.
- Production-level experience in API development, SQL optimisation, CI/CD, and containerised deployment.
- **Code Review:** Experience mentoring junior developers and conducting thorough code reviews.