

MD AZIZ

Senior Full Stack Developer | SaaS & Backend Engineering | PHP & Python | System Architecture

+91 93543 67704 | mdaziz6632@gmail.com | JP Nagar, Bengaluru | [LinkedIn](#) | [GitHub](#)

Profile Summary:

- Full Stack Developer with 5.6+ years of experience in architecting and delivering scalable SaaS, backend, and full-stack applications using PHP, Laravel, CodeIgniter, Python, FastAPI, Flask, JavaScript, and REST APIs.
- Proven expertise in system design, SaaS architecture, microservices, API development, database engineering, and performance optimization, building systems capable of handling approximately 1,000–10,000 requests/second.
- Delivered measurable technology improvements, including 40% reduction in PHP server load, 40% improvement in core query performance, 50% reduction in database overhead, and 10–25% infrastructure cost optimization through architectural and performance enhancements.
- Demonstrated end-to-end product ownership and entrepreneurial capability, independently conceptualizing, architecting, developing, deploying, and scaling Daily Hisab, a consumer finance app achieving 14K+ downloads and 500–1,000 active users.
- Strong exposure to AI/ML and NLP integration, real-time applications, cloud infrastructure, security, and DevOps, complemented by technical leadership and mentoring of 4 developers, driving improvements in code quality, development efficiency, and maintainable engineering practices.

Core Competencies:

- Full Stack Development
- Backend Engineering
- SaaS Architecture & Development
- System Design & Architecture
- PHP / Laravel / CodeIgniter
- Python / FastAPI / Flask
- API & Microservices Development
- Database & Performance Optimization
- AI/ML & NLP Integration

Technical Skills:

- **Programming Languages:** PHP, Python, JavaScript, SQL, Dart
- **PHP Development:** Laravel, CodeIgniter 3, Composer, MVC, RESTful APIs
- **Python Development:** FastAPI, Flask, Pydantic, Asynchronous Processing, NLP Tooling
- **System Design & Architecture:** SaaS Multi-Tenancy, Microservices, Modular Architecture, SOLID Principles, API Design, Caching, Scalability, Performance Optimization
- **Databases:** MySQL, PostgreSQL, MongoDB, Firebase Realtime Database; Indexing, Query Optimization
- **Messaging, Caching & Security:** Redis, Kafka, RabbitMQ, JWT, OAuth2, RBAC
- **Testing & CI/CD:** PHPUnit, PyTest, GitHub Actions, Jenkins, CI/CD Pipelines
- **Cloud & Infrastructure:** AWS, GCP, DigitalOcean, Docker, Nginx, Linux, Cloudflare, Apache, SSL/TLS
- **AI/ML & NLP:** TensorFlow, scikit-learn, BERT, Sentence Transformers, Sentiment Analysis, Classification Models
- **Mobile Development:** Flutter, Dart, GetX, REST API Integration, Firebase Cloud Messaging (FCM)
- **Development Tools:** Git, GitHub, Postman, cPanel, pip, VS Code, SSH

Work Experience:

Full Stack Developer | Skoodle Learning Pvt. Ltd. | Bengaluru | Sep 2023 – Present

- Designed and developed an end-to-end Timetable Management Module, covering day/period setup, single- and multi-period task assignments, and allocation of primary/alternative rooms based on teacher and subject availability.
- Engineered complex scheduling constraints including fixed periods, teacher/subject load optimization, specific subject timing, consecutive classes, first-period class-teacher allocation, split classes, and combined classes.
- Built an advanced Constraint Satisfaction Problem (CSP)-based optimization engine incorporating feasibility analysis, Dynamic MRV, conflict-directed backjumping, tabu search, Luby restart, ejection repair, and simulated annealing for optimized timetable generation.
- Leveraged multiple parallel workers to accelerate timetable generation and efficiently resolve complex scheduling constraints and conflicts.
- Architected and scaled multi-module SaaS platforms spanning Admissions, Curriculum Management, Inventory, and Cafeteria, integrating PHP backend services with Python/FastAPI middleware to support asynchronous workloads and scalable application architecture.
- Engineered RBAC-driven Admissions workflows with granular, role-specific access controls, strengthening authorization governance across staff and administrative user groups.

- Developed a Python/FastAPI asynchronous middleware layer to offload resource-intensive workloads from the core PHP application, achieving a 40% reduction in PHP server load and improving backend resource utilization.
- Designed a Global Menu Permission System using a hybrid file + database architecture with cached JSON delivery and database fallback on user-status changes, reducing database overhead by 50%.
- Built an AI-powered ticketing system leveraging Sentence Transformers for duplicate-ticket detection and sentiment analysis, reducing duplicate tickets by 30% and manual review effort by 30%.
- Delivered a real-time teacher-student chat platform using Firebase, enabling WhatsApp-style live synchronization and responsive communication across users.
- Optimized MySQL database performance by 40% through advanced indexing, JOIN optimization, query refactoring, and elimination of nested-loop logic in favor of efficient single-query solutions.
- Mentored & technically guided a 4-member development team on modular architecture, SOLID principles, & SQL performance optimization through structured code reviews, improving development efficiency & code quality by 10–20%.

Full Stack Developer | Attractive Web Solutions | Delhi | Feb 2021 – Aug 2023

- Led end-to-end development of CRM and e-commerce platforms using Laravel and CodeIgniter, establishing reusable modular components that accelerated development and were adopted across multiple client projects.
- Strengthened production infrastructure and application reliability by hardening Linux/Apache server configurations, automating backup processes, and streamlining deployments, reducing production downtime by 25%.
- Integrated and optimized REST APIs for mobile and client-facing applications, improving backend responsiveness and reducing API response times by 30%.
- Optimized production MySQL databases through schema normalization, indexing, and query-level improvements, driving greater application efficiency while reducing hosting and infrastructure costs.

Projects:

FEATURED PROJECT | DAILY HISAB — Self-Published Personal Finance App (Link - [Android](#) , [iOS](#))

14K+ Downloads | 4.2★ Google Play Rating | 500–1,000 Active Users

Tech Stack: Flutter, Dart, PHP, CodeIgniter 3, MySQL, REST APIs, Firebase FCM, mPDF

- Conceptualized, architected, developed, and launched the personal finance app end-to-end, owning mobile, backend, infrastructure, UI/UX, deployment, and product growth.
- Built a scalable Flutter + PHP/CodeIgniter platform supporting expense tracking, budgeting, bill splitting, financial insights, and real-time notifications.
- Engineered automated financial reporting with dynamic PDF generation, SVG-based charts, category-level analysis, and financial health scoring.
- Developed flexible group bill-splitting supporting equal, unequal, percentage, and share-based expense settlement.
- Managed Google Play Store launch, product branding, marketing, and policy compliance, achieving 14K+ downloads and 500–1,000 active users.

ADDITIONAL PROJECTS

Fincall CRM | PHP/CodeIgniter 3, FastAPI & Next.js

- Built and deployed a production CRM using PHP/CodeIgniter, FastAPI, and Next.js, configuring Nginx, MySQL, Playwright-based PDF generation, Docker/Linux infrastructure, and Cloudflare security.

SafeNet Guardian | FastAPI, Next.js, Chrome Extension & MySQL

- Developing an AI-powered web safety platform using NLP/ML for harmful-content detection, with REST APIs, JWT authentication, and RBAC-secured access across user roles.

Applied ML / R&D

- Developed ML/NLP solutions including a TensorFlow-based Dog Vision Classifier (90% accuracy), Heart Disease Risk Classifier (85% accuracy), and sentiment-analysis model productionized within the Skoodle ticketing system.

Certifications:

- AI & Machine Learning Bootcamp — Udemy | Daniel Bourke

Education:

- **Master of Computer Applications (MCA)** | Manipal University | 2024–2026
- **Bachelor of Computer Applications (BCA)** | Manipal University | 2021–2024
- **Diploma in Hardware Networking** | Jetking | 2018–2020