

# Afnan Muhammad

## Full-Stack Software Engineer & Architect

Layyah, Pakistan | +92 342 6910154 | [ototipotent@gmail.com](mailto:ototipotent@gmail.com)  
[GitHub @OtakuTotipotent GitHub](#) | [LinkedIn in/otakutotipotent LinkedIn](#)

### PROFESSIONAL SUMMARY

Software Engineer specializing in the architecture of scalable, high-performance web applications and APIs. Expertise in UI/UX design & integrating Data Science and AI models. Sovereign Stack approach: deploying vendor-agnostic, self-hosted infrastructure to enhance system control and minimize reliance on expensive PaaS solutions.

### CORE TECHNICAL COMPETENCIES

**Languages:** TypeScript, Python, Java, JavaScript, C++, SQL.

**Frontend Ecosystem:** Next.js, React, Tailwind CSS, PWA Architecture, SSR/SSG.

**Backend & APIs:** Django, Node.js, FastAPI, Java Spring Boot, RESTful & GraphQL APIs, WebSockets.

**Database & ORMs:** PostgreSQL, MongoDB, MySQL, Prisma, Drizzle.

**DevOps & Infrastructure:** Docker, VPS, Linux, Coolify, AWS, CI/CD Pipelines.

### ENGINEERING PROJECTS

**DevHuddle** - *Developer Collaboration Environment in Django fullstack*

**CoreClip** - *Architected an automated short videos creation pipeline.*

**Taskus** - *PWA for task management using low-level browser APIs*

**Willayer** - *Developing a unified cross-platform video downloading and AI content manipulation Web App leveraging Python/TypeScript APIs and cloud storage.*

### EDUCATION

**Bachelor of IT** - *Bahauddin Zakariya University (2021 - 2025)*

Focus: Programming (C++, Java, Python), Database Management, IT Project Management, OOP, Data Structures & Algorithms, Software Engineering Cyber Security, Advanced Mathematics, Web Technologies (HTML, CSS, JS, PHP, Bootstrap/Tailwind), Social & Biological Sciences.

## ARCHITECTURAL PHILOSOPHY & METHODOLOGY

- **Sovereign Infrastructure:** Strong advocate for migrating away from expensive, locked-in serverless platforms (Vercel/Heroku) in favor of optimized, containerized VPS environments using Docker Swarms and Coolify.
- **Code Quality & Typing:** Enforces strict static typing across full-stack boundaries (TypeScript/Python Type Hints) to eliminate runtime exceptions and ensure maintainable, self-documenting codebases.
- **Continuous Learning:** Epistemophilic approach to computer science. Regularly engages in structured, multi-day deep-dive sprints into foundational subjects (Programming, Hardwares & Softwares, tooling, productivity, Data & structures, Statistics, Data science, Human resources etc) to better understand the low-level mechanics of systems.

## EXTENDED SKILL MATRIX

- **Authentication & Security:** Auth0, NextAuth, JWT, Token-based verification, OAuth2.
- **UI/UX Engineering:** ShadCN, Material UI, Figma-to-Code translation, pixel-perfect responsive logic.
- **Business Systems:** Technical integration of e-commerce architectures, Stripe/Lemon Squeezy payment gateways, and B2B SaaS modeling.
- **Linguistics for Global Collaboration:** Fluent in English, Urdu, Hindi; basic proficiency in Arabic. Capable of driving architectural discussions in diverse remote teams.