

MUHAMMAD WASIF MALIK

Software Engineer

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[LinkedIn](#) | [GitHub](#) | [Portfolio](#)

PROFESSIONAL SUMMARY

Software Engineer building production web applications and systems-level software end-to-end. Specialised in concurrent backends with Go, modern frontends with Next.js, and security-first architecture. Have shipped a zero-knowledge encrypted cloud platform across web, desktop, and terminal clients, a real-time chat system across web and mobile, and a range of client products spanning e-commerce, POS, HRMS, and real-estate. Comfortable owning every layer, schema design, backend services, client implementations, and deployment. Open to remote opportunities globally.

TECHNICAL SKILLS

Languages: TypeScript, JavaScript, Go, Python, SQL

Frontend: Next.js (App Router, SSR, ISR, RSC), React, React Native, Redux Toolkit, Vue.js, Tailwind CSS, Framer Motion, SCSS, Bun

Backend: Go (stdlib net/http, Goroutines, Channels), Node.js, NestJS, Express.js, Django, FastAPI, REST APIs, WebSockets, JWT

Databases: PostgreSQL, MongoDB, MySQL, SQLite, Firebase, Amazon RDS

Cloud & DevOps: Vercel, Docker, Git, GitHub Actions, CI/CD

Security: AES-256-GCM, PBKDF2, Web Crypto API, WebAssembly, Zero-Knowledge Architecture

Tools: Jira, Confluence, Postman, Clerk Auth, Liveblocks, Lexical Editor, Zod, GetStream

PROFESSIONAL EXPERIENCE

Software Engineer, Avialdo Solutions | Karachi, Pakistan, Jan 2025 - Present

- Build production web applications using Next.js 15 (App Router, SSR, ISR) with optimised data-fetching for enterprise-grade systems.
- Develop backend services across NestJS (TypeScript) and Django (Python), maintaining REST APIs that power client-facing dashboards and internal tooling.
- Design complex PostgreSQL schemas, author performance-optimised queries, and drive technical decisions in Agile sprints (Jira, Confluence).

MERN Stack Developer (Part-Time), Nexsoft | Karachi, Pakistan, May 2025 - Oct 2025

- Delivered multiple client products end-to-end in a part-time role: the company brand site, a full e-commerce platform, and an internal HRMS (Human Resource Management System).
- Built the e-commerce platform on the MERN stack (MongoDB, Express.js, React, Node.js) with product catalogue, cart, and order flows backed by MongoDB schemas.
- Designed and shipped the HRMS with role-based modules for employee records and HR workflows, using Express.js REST APIs and a React frontend.

Next.js Developer, Softechbar | Remote, Jan 2024 - Dec 2024

- Delivered a range of client projects: multiple brand websites, point-of-sale (POS) systems, and real-estate web solutions.
- Built the POS systems with Next.js and TypeScript, covering product, transaction, and inventory interfaces with server-rendered pages for performance.
- Developed real-estate solutions with property listings, search, and detail flows, using optimised data-fetching (SSR / SSG) for SEO and load speed.

Frontend Engineer (AI Products), Liftup AI | Jamshoro, Pakistan, Jan 2024 - Mar 2024

- Engineered responsive, production-grade React + Redux interfaces for AI-driven analytics dashboards used by internal teams.
- Architected a reusable Tailwind CSS component library that reduced new-feature development time by approximately 30%.
- Achieved 60fps UI animations and sub-2-second page loads through code-splitting, asset optimisation, and aggressive caching.

Web Developer (Intern), Interns Pakistan | Remote, Pakistan, Oct 2022 - Dec 2022

- Built responsive web pages and components using React, Vue.js, HTML5, CSS3, and modern JavaScript (ES6+).
- Strengthened core web fundamentals: DOM APIs, semantic markup, web accessibility (WCAG), and responsive design.
- Adopted Git-based collaboration workflows (feature branches, pull requests, code review) used in real-world software teams.

SELECTED PROJECTS

Zcrypt: Zero-Knowledge Encrypted Cloud Storage Platform

Tech: *Go (stdlib), Next.js, TypeScript, Bun, PostgreSQL, Tauri, Web Crypto API, WebAssembly, SQLite, Bubble Tea*

- Designed and shipped a zero-knowledge cloud storage platform (zcrypt.cloud) where the server cannot decrypt user files, same threat model as Bitwarden / 1Password; positioned as an open-source Dropbox / Google Drive alternative.
- Built three client surfaces against a single Go backend: a Next.js web app (Bun runtime), a Tauri cross-platform desktop app, and a Bubble Tea terminal client (TUI), all consuming a custom stdlib HTTP server with zero framework dependencies.
- Implemented client-side AES-256-GCM encryption with PBKDF2 key derivation and zstd compression via Web Crypto API + WebAssembly, so the server only ever handles opaque encrypted blobs.
- Engineered a chunked upload/download pipeline with repo-pool auto-rotation distributing encrypted chunks across GitHub, GitLab, and HuggingFace, a bring-your-own-backend (BYOB) architecture with no commercial cloud dependency.

Live: zcrypt.cloud | TUI: zcrypt.cloud/tui | Source: github.com/Wosmos

Learny: Online Tutoring Platform with Gamified Learning (FYP)

Tech: *Next.js 15, TypeScript, PostgreSQL, GetStream, Tailwind CSS, Firebase*

- Built an end-to-end online tutoring platform (learnity-app.vercel.app) connecting students with verified tutors for personalised 1-on-1 sessions and synchronous study groups.
- Engineered a custom gamification engine, XP system, streak multipliers, and progression formulas, designed around behavioural-engagement loops that reward consistent learning.
- Integrated GetStream for real-time HD video tutoring; implemented role-based access control across Students, Teachers, and Admins with isolated permission scopes.
- Owned the product end-to-end, schema, backend, authentication, real-time video, gamification, and the full Next.js 15 (SSR / ISR / App Router) frontend, shipping a complete EdTech product solo.

Live: learnity-app.vercel.app | Source: github.com/Wosmos/Learny

NetLink: Real-Time Chat Platform (Web + Mobile)

Tech: *Go (Goroutines, Channels, WebSockets), Next.js, Bun, React Native, PostgreSQL, TypeScript*

- Built a complete chat platform from scratch, a Go backend, a Next.js + Bun web client, and a React Native mobile app, all sharing a single bidirectional WebSocket protocol.
- Designed a concurrent WebSocket server using Go's goroutines and channels to handle thousands of simultaneous connections with low-latency message fan-out.
- Architected a lightweight, framework-free messaging protocol with persistent PostgreSQL storage for chat history, presence, and delivery state.
- Implemented the React Native mobile client with shared state management and offline-resilient message queuing, mirroring the web client feature set.

Source: github.com/Wosmos/NetLink

EDUCATION

Bachelor of Science in Software Engineering, University of Sindh

2022 - 2026 | 3.0 GPA

Intermediate (Pre-Engineering), Eagle House | 89% | 2021 - 2022