

MUHAMMAD WAQAR

Senior Full-Stack Engineer | Mobile & Web Architecture | Fintech & Blockchain Platforms

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PROFESSIONAL SUMMARY

Senior Full-Stack Engineer with 8+ years delivering production-grade web and mobile applications across fintech, healthcare, real estate, and Web3 domains. Experienced in the full software lifecycle — from architecture and backend API design to frontend UI and DevOps — with a strong track record leading engineering teams and shipping complex platforms at scale. Deep expertise in React Native, Next.js, NestJS, Node.js, TypeScript, PostgreSQL, and AWS, complemented by hands-on experience with blockchain integrations when the product demands it. Adept at translating business requirements into clean, maintainable systems.

TECHNICAL SKILLS

Frontend	React.js · Next.js · React Native (Expo) · TypeScript · Redux · Tailwind CSS · HTML/CSS
Backend	Node.js · NestJS · Express.js · RESTful APIs · GraphQL · WebSockets · Microservices
Databases	PostgreSQL · MongoDB · Redis · Supabase · DynamoDB · Firebase
Cloud & DevOps	AWS (EC2, Lambda, S3, RDS, ALB, VPC, IAM, CloudWatch) · Docker · CI/CD · GitHub Actions
Mobile	iOS & Android · Native Modules · Push Notifications · Biometric Auth · App Store Deployment
Integrations	Stripe · DocuSign · Checkbook.io · AWS Chime · Twilio · LangChain · Power Automate
Blockchain/Web3	Ethereum · BSC · Bitcoin Ordinals · Smart Contracts · Solidity · Web3.js · Ethers.js

PROFESSIONAL EXPERIENCE

Senior Full-Stack Engineer

Apr 2025 – Present

TappEngine Inc. | Remote, United States

- ▶ Architecting a full-stack loan securitization and tokenization platform (9SQUID) serving credit unions, with complex financial workflows including deal structuring, tranche configuration, and waterfall mechanics
- ▶ Built a scenario-based cashflow modeling engine with parallel execution (Promise.all) handling CPR/CDR/LGD stress testing and coupon sensitivity analysis across multiple tranche configurations
- ▶ Engineered scalable NestJS backend APIs and React frontend with PostgreSQL/AWS infrastructure to support SOC 2 / GDPR compliance requirements and high-value transaction processing
- ▶ Led third-party service integrations including DocuSign for e-signatures, Checkbook.io for investor-to-trustee payment flows, and SWIFT API research for real-time payment monitoring
- ▶ Implemented AWS security hardening: IAM roles, Secrets Manager, Inspector, NACL configurations, and Data compliance controls

Software Engineering Lead

Feb 2024 – Jul 2025

Yadn | يدن | Riyadh, Saudi Arabia (Remote)

- ▶ Led full-stack development of the OLAB platform — a React Flow visual canvas with Notion-style database — architecting state management patterns and real-time synchronization for collaborative workflows
- ▶ Built a comprehensive admin dashboard with Next.js and Supabase backend managing NFT lifecycle and platform data for thousands of concurrent users

- ▶ Integrated AI automation using LangChain for intelligent workflow orchestration, maintaining full-stack ownership from UI through backend services
- ▶ Architected WebSocket-based infrastructure for real-time transaction monitoring and RESTful APIs for wallet integrations within a Web3 gaming platform
- ▶ Developed custom admin tooling, analytics dashboards, and role-based access control systems supporting business operations

Senior Full-Stack Engineer

Oct 2021 – Sep 2023

KryptoMind LLC | Lahore, Pakistan

- ▶ Led mobile engineering teams building and scaling enterprise applications across multiple platforms, establishing architectural patterns and mentoring junior developers
- ▶ Architected and scaled Cryptokara — a React Native application serving 500K+ active users — with multi-account management, real-time price feeds via WebSockets, and complex transaction history views
- ▶ Built CQR Vault mobile application with secure key management, biometric authentication, push notifications, and performance-optimized UI across iOS and Android
- ▶ Owned full mobile architecture decisions: state management (Redux), navigation, performance optimization, and security implementations
- ▶ Extended and maintained Node.js backend services, building RESTful APIs to support mobile feature requirements and third-party integrations
- ▶ Implemented CI/CD pipelines for automated mobile deployments and conducted smart contract audits with 30% gas optimization

Senior Software Engineer & Team Lead

Sep 2023 – Aug 2024

Pixelk Technologies | Lahore, Pakistan

- ▶ Led technical teams across multiple client projects, driving serverless architecture adoption that reduced infrastructure costs by 40%
- ▶ Developed AWS Chime SDK integration for an NHS telehealth platform, implementing WebRTC video consultations and real-time communication features
- ▶ Architected microservices with AWS Lambda, DynamoDB, and Node.js, ensuring scalability and reliability during high-traffic periods
- ▶ Established CI/CD pipelines reducing deployment times by 65%; enforced code quality standards and architectural alignment across teams

Full-Stack Engineer

Apr 2020 – Oct 2021

Coding Pixel | Lahore, Pakistan

- ▶ Delivered cross-platform React Native applications for iOS and Android including Sports Saver, Siteseekr, and gWallet (payment app with biometric authentication)
- ▶ Built full Node.js backends for client applications, implementing REST APIs, authentication, and payment system integrations
- ▶ Established reusable component libraries and architectural patterns that accelerated team development cycles by 35%

EDUCATION

Bachelor of Science in Software Engineering

University of the Punjab, Lahore, Pakistan | 2018 – 2022

KEY HIGHLIGHTS

- ▶ 500K+ active users served by mobile applications built and scaled under my technical leadership
- ▶ Full-stack platform ownership across fintech (securitization, payments), healthcare (NHS telehealth, HIPAA/GDPR), and Web3 products
- ▶ Infrastructure cost reductions of 40% and deployment cycle improvements of 65% through architecture modernization

- ▶ 8+ years across startups and remote product teams spanning US, Saudi Arabia, and Pakistan — consistent delivery in cross-functional, async environments