

Waqas Gul

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Professional Summary

Full Stack Software Engineer with expertise in modern web and mobile technologies including React Native, React.js, Next.js, Node.js, FastAPI, and cloud platforms. Experienced in building scalable applications with TypeScript and Python, BLE device integration, EEG data processing, desktop application development with Electron, and cloud deployment on AWS. Strong background in developing production-grade full-stack solutions with a focus on performance, user experience, and deployment best practices.

Professional Experience

MINDTUNE INNOVATION – Wah Cantt, Pakistan

Aug 2025 – Present

Full Stack Software Engineer

- Developed and maintained cross-platform mobile applications using React Native and TypeScript integrated with BLE-connected EEG devices for real-time brain data acquisition
- Built backend services and RESTful APIs using FastAPI and PostgreSQL for EEG data processing, focus/stress/wellness scoring, and intelligent task recommendation
- Engineered a desktop research application using React, TypeScript, and Electron for organized multi-user EEG data recording and analysis
- Developed the Zone earbuds product website using React and TypeScript, hosted on Hostinger
- Managed cloud infrastructure and deployments on AWS; published mobile apps to Google Play Store and Apple App Store
- Applied Terraform for infrastructure-as-code and handled database migrations across environments

ITSOLERA PVT LTD – Islamabad, Pakistan

Nov 2024 – Aug 2025

Full Stack Developer

- Developed and maintained full-stack applications using MERN stack with TypeScript
- Integrated machine learning models with React/Next.js frontends for real-time predictions
- Built RESTful APIs with Express.js and FastAPI, implementing authentication and data validation
- Managed databases using MongoDB and PostgreSQL, optimizing queries for performance
- Implemented responsive UI components using TailwindCSS and Shadcn UI
- Deployed applications using Docker containers on AWS and VPS hosting platforms

ITSOLERA PVT LTD – Islamabad, Pakistan

July 2024 – Nov 2024




MERN Stack Intern

- Assisted in developing web applications using React.js, Node.js, and MongoDB
- Implemented frontend components with TailwindCSS and responsive design principles
- Gained experience in integrating backend APIs with frontend applications
- Participated in code reviews and agile development processes

Education

University of Malakand Bachelor of Software Engineering CGPA: 3.74/4.00	2021 – 2025
Gullabad Degree College, Dir Lower Pre-Engineering Marks: 908/1100	2019 – 2021

Projects

Zone – BLE EEG Mobile Application <ul style="list-style-type: none">• Built a cross-platform mobile app that connects with BLE-enabled EEG devices to stream and process raw brain data in real time• Implemented signal processing pipelines to calculate focus, stress, and wellness scores from raw EEG data• Developed an intelligent recommendation engine to suggest stress-reduction techniques, rest schedules, and tasks based on cognitive state• Integrated a modern task and event management system for productivity tracking aligned with mental wellness• Technologies: React Native, TypeScript, FastAPI, PostgreSQL, TailwindCSS, AWS, BLE, Google Play Store, Apple App Store	Play Store & App Store
Zone Cognitive Assessment – EEG Research Desktop Application <ul style="list-style-type: none">• Engineered a cross-platform desktop application for research teams to connect with BLE EEG devices and record raw brain data per user in a structured, organized manner• Designed a clean data management interface enabling researchers to tag sessions, manage participants, and export datasets• Deployed backend services on AWS with PostgreSQL for persistent data storage and session management• Technologies: React, TypeScript, Electron, FastAPI, PostgreSQL, AWS, BLE	Desktop App
Zone Earbuds – Product Website <ul style="list-style-type: none">• Developed a professional product website showcasing the Zone EEG earbuds, their features, design, and use cases• Built with a modern, responsive UI to communicate product value and drive user engagement• Technologies: React, TypeScript, Hostinger	 Live
Zaroori Zameen – AI-Powered Real Estate Platform (Final Year Project) <ul style="list-style-type: none">• Developed a comprehensive real estate platform using MERN stack with modern front-end technologies• Implemented state management using Redux and RTK Query for efficient data fetching and caching• Built responsive UI with Tailwind CSS and integrated AI models for property valuation• Developed web scraping modules to gather real-time property data and market trends• Technologies: MERN Stack, React.js, Node.js, Express.js, MongoDB, Redux, RTK Query, Tailwind CSS, AI/ML, Web Scraping, TypeScript	 Code
ITsolera Official Website <ul style="list-style-type: none">• Developed the company’s official web application with client onboarding and project management features	 Live

- Implemented secure authentication and real-time service request handling
- Created responsive design with TailwindCSS and optimized performance
- Technologies: React.js, Next.js, Node.js, Express.js, MongoDB, TailwindCSS

Security Operations Center (SOC) Dashboard – Threat Intelligence Platform

Live Soon

- Developed a comprehensive SOC dashboard using MERN stack for real-time security monitoring
- Implemented state management using Redux and RTK Query for efficient threat data fetching and caching
- Built responsive UI with Tailwind CSS for security analysts with real-time alert visualization
- Integrated AI/ML models for anomaly detection and threat prediction using behavioral analytics
- Technologies: MERN Stack, React.js, Node.js, Express.js, MongoDB, Redux, RTK Query, Tailwind CSS, AI/ML, TypeScript, Cybersecurity APIs

React Admin Dashboard – Modern Management Interface

[Live](#) [Code](#)

- Developed a responsive and modern admin dashboard using React.js with TypeScript
- Implemented state management using Redux and RTK Query for efficient data fetching and caching
- Integrated dark mode support with seamless theme switching and modular reusable components
- Technologies: React.js, TypeScript, Redux, RTK Query, Tailwind CSS, Component Library

FoodLakay – Next.js Food Delivery Platform

[Live](#) [Code](#)

- Developed full-stack food delivery application using Next.js with TypeScript
- Implemented PostgreSQL database with Prisma ORM and integrated Stripe payment processing with NextAuth.js
- Deployed on Vercel with optimized serverless architecture
- Technologies: Next.js, TypeScript, PostgreSQL, Prisma, Stripe, NextAuth, Tailwind CSS, Vercel

MERN Stack E-Commerce Platform

[Code](#)

- Developed full-featured e-commerce solution with JWT authentication, user/admin roles, and Stripe/PayPal payment integration
- Built comprehensive product management with CRUD operations, reviews, ratings, and admin dashboard
- Technologies: MERN Stack, React, Node.js, MongoDB, Express, Redux, JWT, Stripe, Bootstrap

Alieu-Kamara – Cybersecurity Portfolio Website

[Live](#) [Code](#)

- Developed a professional portfolio for a Cybersecurity CTO featuring smooth animations via Framer Motion and a security-focused design
- Technologies: React.js, Tailwind CSS, Framer Motion, TypeScript

Certifications

- Full Stack Web Development Certification – ITSOLERA (2024)
- MERN Stack Development – Online Course Completion (2023)
- Diploma in Information Technology (1 Year) – Physical Course Completion (2022)

Technical Skills

- **Frontend Development:** React.js, Next.js, React Native, JavaScript, TypeScript, Redux Toolkit (RTK), Context API, Tailwind CSS, Bootstrap, Shadcn UI, Material-UI, HTML5, CSS3, Responsive Design
- **Desktop Development:** Electron.js (cross-platform desktop apps with React + TypeScript)
- **Backend Development:** Node.js, Express.js, Python, FastAPI, Flask, RESTful APIs, GraphQL, Middleware Development
- **Databases & Migrations:** MongoDB, PostgreSQL, Firebase Firestore, Firebase Auth, Database Design, Database Migration
- **DevOps & Infrastructure:** Docker, AWS (EC2, S3, Lambda), Terraform, VPS Hosting, CI/CD (GitHub Actions, Jenkins), Nginx, Vercel, Netlify, Hostinger
- **Mobile & Hardware:** BLE (Bluetooth Low Energy) Integration, EEG Device Communication, Google Play Store, Apple App Store Deployment
- **State Management:** Redux Toolkit (RTK), Redux, Context API
- **Testing & Quality:** Jest, React Testing Library, Postman, ESLint, Chrome DevTools
- **Tools & Methodologies:** Git, GitHub, VS Code, Vite, Figma, Jira, Agile/Scrum

Hobbies & Interests

- Exploring new technologies and frameworks
- Contributing to open-source projects
- Playing cricket and video games
- Technical blogging and knowledge sharing