Muhammad Ahad

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ABOUT MYSELF

I am a dedicated software developer with a Master's degree in Computer Science and over 4 years of experience in web application development. I have contributed to diverse projects, ranging from dynamic web applications to innovative IoT systems. My expertise lies in crafting robust solutions by seamlessly integrating front-end and back-end technologies. I am passionate about building scalable applications, optimizing server management, and leveraging modern JavaScript frameworks. With a strong focus on solving complex problems and delivering impactful results, I thrive in dynamic, fast-paced development environments.

Key Skills

JavaScript,Typescript, ReactJs, Next Js, React Native, Redux, HTML, CSS, Tailwind css, Node Js, Express Js, Flask, MySQL, MongoDB, PostgreSQL (Supabase), WebSocket, MQTT, VPS, Nginx, Supabase(bucket, functions, realtime), AWS (EC2,S3,Lamda), Postman, Docker, Kubernetes, Git

Education

Bahauddin Zakariya University   *2018 - 2020*
MSC in Computer Science

- GPA: 3.46/4.0
- **FYP:** Tourism Management System using MERN stack

Experience

Software Engineer   *(Remote), USA*
Leasemagnets   *Oct 2021 – Current*

- Developed and maintained RESTful APIs using **Flask**, migrated databases from MySQL to Supabase, and integrated various third-party services, including OpenAI, Cobrowse, Jitsu, and Twilio.
- Designed and implemented pipelines for lead management, video uploading, and encoding, leveraging third-party services like Coconut.co for efficient processing.
- Utilized **Node.js** to develop **microservices** and implement cron jobs for automation, improving system reliability and operational efficiency.
- Integrated **BigQuery** to deliver advanced analytics on user interactions and metadata, enabling data-driven decision-making.
- Built reusable **React** frontend modules and performed efficient API integrations to enhance application scalability and user experience.

Backend Developer (Part-Time)   *Multan, Pakistan*
ZeeSoft   *Jul 2023 – Aug 2024*

- Developed and maintained scalable REST APIs using **Node.js** and **Express.js**, ensuring high availability and performance.
- Integrated APIs with **React.js** frontends, utilizing **Redux** for effective state management.
- Leveraged **Next.js** for server-side rendering and dynamic routing to build optimized web applications.
- Worked on projects involving **OpenAI** integration for AI-driven solutions tailored to medical datasets and job-seeking platforms.
- Designed and managed databases with **MongoDB** and **Supabase**, ensuring data integrity and efficiency.
- Collaborated on large-scale projects such as:
  - **Medical Chatbot**: Integrated **OpenAI** with a medical dataset, enabling speech-to-text interactions and PDF uploads to enhance chatbot accuracy and relevance.

- **Car Rental Service**: Developed a user-friendly platform for seamless bookings, affordable rates, and a wide selection of vehicles.
- **AI-driven Job Platform**: Created a web and app platform for job seekers, incorporating **Affinda** for CV matching and personalized job suggestions, focusing on medical professionals.

MERN Stack Developer *Multan, Pakistan*
Zeoel *Jan 2021 – Aug 2021*

- Developed and maintained REST APIs using **Node.js** (Express.js).
- Implemented **Redux** for state management in React and React Native applications.
- Designed a robust and scalable database structure using **MongoDB**, ensuring reliability, scalability, and a seamless user experience.
- Implemented seamless API integration on the **React** front-end while managing application state efficiently with Redux.
- Conducted mentoring sessions to teach MERN stack and React Native to interns.

Projects

Online Food and Grocery Order Management System

- Developed RESTful APIs and implemented Redux for efficient state management, enabling seamless functionality across applications. Designed a product order system with live notifications and secure JWT-based authorization to enhance user experience and security. Integrated messaging service APIs, custom email services, and real-time rider tracking using WebSockets and Mapbox for improved operational efficiency. Additionally, built a React Native rider app to facilitate location sharing and streamline order management processes.
- Tools Used: NodeJS, ReactJs, Redux, Mongodb, Websocket, Mapbox, React native, JWT, Twilio,

Water Analysis system

- Developed RESTful APIs and implemented the MQTT protocol for seamless communication with online devices. Utilized WebSockets to monitor sensor readings in real-time and enable device control directly from the frontend. Designed and integrated a user chat feature and implemented comprehensive analytics for device performance and data readings, enhancing system functionality and user engagement.
- Tools Used: ReactJs, NodeJs, MQTT, Websocket, Mongodb

AI-Powered Medical Chatbot with Voice Integration

- Integrated OpenAI with a medical dataset to develop a chatbot capable of providing accurate, data-driven responses based on the supplied medical information. Enabled a speech-to-text feature, allowing users to communicate via voice, with the chatbot offering tailored medical advice or suggestions. Implemented functionality for users to upload PDFs to update and enhance the OpenAI-trained dataset, ensuring the chatbot remains accurate and relevant. This system combines conversational AI with real-time data integration to deliver personalized and reliable medical insights.
- Tools Used: NextJs, OpenAi, Google Cloud Speech-to-Text, Supabase, Zustand,