Aoun Muhammad

(Full Stack Software Developer)

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I breathe life into software development ideas! With hands-on experience in MERN stack, React Native, and AI/ML technologies including Computer Vision, I specialize in building scalable web and mobile applications. I'm passionate about creating intelligent software solutions and deploying real-time AI models with a strong foundation in JavaScript, TypeScript, and Python. Graduate in BS Software Engineering from the University of Mianwali, I bring a blend of development and innovation to every project that I work on.

EDUCATION

- BS in Software Engineering | University of Mianwali 3.20 CGPA | Nov 2021 July 2025
- FSc Pre-Engineering | Superior College Mianwali 71% | 2019 2021
- Matric (Science) | Govt. High School Isa Khel
 77% | 2017 2019

Skills

Web Development Skills

- Frontend Development: React.js, Next.js, Vue.js (foundational knowledge), HTML, CSS, JavaScript, Bootstrap
- Backend Development: Python (Django), MERN Stack (MongoDB, Express.js, React.js, Node.js), SQL.

Computer Vision

- Developed and integrated end-to-end computer vision systems.
- Deep Learning Models: Trained and tested YOLO models (V8, V11) for object detection.
- Image Analysis: Experienced in object segmentation and classification tasks.

AI/ML

- AI/Machine Learning: Experienced in training and deploying deep learning models, including Xception.net for deepfake image detection.
- ML Frameworks & Libraries: Proficient with TensorFlow, TensorFlow Lite, and OpenCV for various AI and computer vision applications.

Mobile App Development

- Developed cross-platform mobile applications using React Native and React Native CLI.
- React Native Ecosystem: Proficient in state management (e.g., Context API, Redux), navigation (React Navigation), API integration, and performance optimization for mobile applications.

ACADEMIC PROJECTS

- SensiView | React Native, Python, YOLOv8
 - mobile application developed for visually impaired individuals, featuring real-time object detection, OCR for text reading, currency recognition, and environment navigation.
- E-Commerce Website | React.js, Node.js, MySQL

An online shopping platform with user authentication, product catalog, shopping cart, and order management.

- Attendance Management System | C++
 - console-based system that records and manages student attendance using file handling and basic data structures.
- Portfolio Website | MERN
 - personal portfolio showcasing skills and projects with a clean, responsive layout.
- Pizza Delivery System | Java (OOP)
 - desktop application designed using object-oriented programming principles, enabling order placement, tracking, and billing.

Professional projects (Web development)

Deepfake image detection website | React, Python (Django), Xception.net

- Developed UI using Figma.
- Developed a web application to detect whether uploaded images are real or deepfake.
- Built the frontend using **React** for a responsive user interface.
- Trained the xception.net model on custom dataset(Kaggle)
- Handled the backend with **Django** (Python) and integrated a deep learning model for inference.
- Handled the integration using Fast API.
- Enabled image based detection by seamlessly connecting the model with the web interface.

E-Commerce Glasses Website

- Created the UI using Figma
- Created a responsive e-commerce platform for browsing and purchasing tempered window glasses.
- Designed the frontend using **React** for a clean and dynamic user experience.
- Managed backend functionality with **Django (Python)**, including product listings and user management.
- Integrated cart systems for a complete shopping workflow.

App development (React Native)

SensiView | React.Native, Python (Django), SQL lite

- Created the UI using Figma
- Created the frontend using React Native for seem-less interaction.
- Trained the seat detection Model which detects either the seats are empty or not for visually impaired persons using Yolo V8m.
- Trained the cash detection model using yolo V8(large) for detecting cash in real-time.
- Trained the COCO dataset on YOLO V81 for general detection.
- Text detection in real-time using API.
- Handled the backend using python(Django)
- Integrated the all the models using Web socket for real-time detection.

Recipe Generator App | React.Native, MERN stack (Mongo, Express, Node.js)

- Designed the complete user interface using Figma focusing on intuitive user experience and accessibility.
- Built the frontend using React Native to ensure a smooth, cross-platform mobile experience.
- Implemented user **authentication** and session handling using **JWT** and **MongoDB** for secure login and signup processes.
- Developed a custom AI-powered recipe generation API using Node.js and Express, integrating OpenAI's
 GPT model to create personalized recipes based on user-input ingredients.
- Created **MongoDB schema models** for users, ingredients, and saved recipes with proper relationships and indexing for efficient data access.
- Integrated **image upload** and **ingredient recognition** functionality to allow users to take pictures of ingredients for automatic parsing.
- Used **WebSockets (Socket.IO)** for real-time data sync, such as updating recipe suggestions when the ingredient list is modified.
- Integrated the all the models using Web socket for real-time detection.

References

Refrences would be provided on request .