MADHAV WADHWANA

EXPERIENCE

Full Stack DeveloperJuly 2025 - PresentTimeverse LtdAhmedabad, Gujarat

- Developing and maintaining the entire application stack, covering both frontend (React Native) and backend services.
- Built scalable mobile experiences with smooth navigation, animations, and robust state management.
- Designed and implemented reusable React components, optimized performance, and ensured pixel-perfect UI across devices.
- Developed and integrated RESTful APIs, managed database operations, and set up deployment pipelines for production-ready systems.
- Collaborated with cross-functional teams to deliver end-to-end features from concept to deployment.

Product Development Intern

July 2024 - Oct 2024

VisiLean Ltd

Ahmedabad, Gujarat

- Leveraged GitHub *GraphQL* API for data ingestion and ETL processing, generating JSON-based analytical reports to enhance repo intelligence.
- Implemented a Cesium JS-powered 3D geospatial visualization module, augmenting UI/UX interactivity for geospatial analytics.
- Refactored and optimized Power BI dashboards, streamlining data pipelines and enhancing BI visualizations for data-driven decision-making.
- Synergized with cross-functional Agile squads throughout the *SDLC*, driving seamless *CI/CD* workflows from design inception to production rollout.

PATENTS

Plantation and Habitat Control Device for Vegetative Propagated Crops

Patent No: 2023210141007 A | Filed Jul 16, 2025

- A cuboidal device equipped with motorized wheels for maneuvering across farm fields.
- Includes a storage chamber, screw conveyor, processing chamber, and motorized cutter to prepare crop segments for sowing.
- Features a soil quality assessment module that provides real-time ground condition analysis.
- Equipped with fertilizer and water storage systems, regulated through valves and pipes, and a robotic arm with a digging unit for automated sowing.

Mobile Device for Rejuvenating Diabetic Patients

Patent No: 202521068003 | Filed Jul 16, 2025

- A mobile device mounted on wheels with a data input module to capture user profile, medical prescriptions, and desired health goals.
- Incorporates an image sensing module for user identification and a wearable band to track real-time vital parameters.
- Features a food preparation module that generates customized diets by comparing prescriptions, vitals, and goals with a prestored database.
- Includes a blood glucose monitor, smart glasses for guided exercises, and robotic arms to physically support the user during workouts.

SKILLS

Languages C/C++, Python, Java(Beginner), HTML, SQL

Libraries/Frameworks: PyTorch, TensorFlow, Git, Docker, OpenCV, Flask, Django, Spring Boot(Beginner) **Technologies:** Visual Studio, Microsoft 365, AWS (EC2, SageMaker, etc), Azure, HuggingFace

Database: PostgreSQL, MongoDB

Frontend Development: React, React Native, JavaScript, TypeScript, CSS, Tailwind, Redux, State Management, UI/UX

Optimization

Backend & APIs: Node.js, Flask, Django, REST APIs

EDUCATION

Marwadi University, India

July 2021 - May 2025

Bachelor's in Computer Engineering, Specialization in Artificial Intelligence

Relevant Coursework: Machine Learning, Data Science, Representation Learning (incl. LLMs)

PROJECTS

Password Generator Github

• Developed a Java console application project focused on password generation and strength assessment. Utilized Apache Maven for streamlined project management and dependency handling.

Attendance Tracker using JSP, JDBC, HTML & CSS

Github

• Developed an Attendance Tracker using JSP, JDBC, HTML, and CSS, facilitating simplified tracking and management of attendance records for educational or organizational purposes.

Credit Card Input Github

 Built and customized a React Native credit card input component with real-time validation and smooth animations to enhance secure mobile payment experiences.

Billing System using Java Swing & JDBC

Github

• Engineered a Billing System with Java Swing and JDBC, enabling users to manage transactions, generatez invoices, and maintain a sales database efficiently.

Cryptocurrency Price Difference Prediction

Github

- Built a Bi-directional LSTM model using TensorFlow and Keras to predict cryptocurrency price differences from historical data.
- Optimized model performance through hyperparameter tuning and integrated real-time data via API for accurate forecasting.

OR Generator

Github

• Developed a dynamic webpage utilizing an API to generate QR codes from user-input text, enhancing user interactivity and functionality. Implemented efficient front-end design ensuring seamless integration and userfriendly experience.

3D Globe Integration

Github

• Developed and integrated a 3D globe feature into a web application using Cesium JS. Enhanced user interaction with geographical data by enabling interactive geographical visualizations. The globe was designed to be fully responsive and accessible across different devices.

Ai-Assistant-integrated-with-DeepSeek-API

Github

• Developed a cross-platform React Native app integrated with DeepSeek API to deliver AI-generated responses in real-time with streaming. Implemented low-latency, context-aware conversational features, multi-platform support, and a customizable UI using React Native Reanimated, React Context API, and Tailwind CSS.