

Prakhar Malviya

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Education

VELLORE INSTITUTE OF TECHNOLOGY , Bhopal

2022-2026

B-TECH IN COMPUTER SCIENCE

CGPA:8.84/10

Relevant Coursework: Computer Science fundamentals, Network Programming (TCP/IP protocols), Object Oriented Programming, Databases, Discrete Mathematics, Data Structures and Algorithms, Operating Systems, Computer Networks, Machine Learning

Experience

AMAZON SAMBHAV HACKATHON 2024

Nov -2024

Eco Sort Python App – Prototype Phase Selection

Developed **Eco Sort**, a Python app for automating waste sorting, using **Pandas** for data manipulation and **Streamlit** for an interactive interface, selected for the prototype phase in an innovation competition.

- Utilized **Pandas** to process and clean large CSV datasets, optimizing data for model training and analysis.
- Built a **Streamlit** interface to upload CSV files, view real-time sorting results, and visualize waste categorization trends.
- Reduced processing time by 30% through efficient data handling and developed sorting logic to classify waste into recycling categories.
- Collaborated with the team to refine the app based on user feedback, improving accuracy and usability, and demonstrated its potential for scalable waste management solutions.

Project Work

1) Patient Health tracker - Self Project, Tech Stack: React, JavaScript, Node.js, Express, MongoDB, Git, Axios,

- Developed a full-stack AI-powered health tracking system focused on mental health support, with 95% data accuracy for tracking and managing health data.
- Crafted and implemented user-friendly interfaces in React for features like patient registration, health record viewing, and appointment scheduling, which boosted user engagement by 30%.
- Automated patient reminders using node-cron and Nodemailer, resulting in 40% more timely follow-ups and increased appointment adherence.
- Integrated a MongoDB database with Mongoose to securely store and manage user health data, improving data retrieval speeds by 25%.

2) Path Finder - Self Project, Tech Stack: Data Structures and Algorithm, Html, CSS, JavaScript

- Developed an interactive web application leveraging Dijkstra's algorithm to determine the shortest route between two cities.
- Demonstrated proficiency in pathfinding algorithms and web development through this project.
- Architected an intuitive interface for seamless route visualization and selection, significantly improving user experience and accessibility.
- Optimized application performance, reducing processing time by over 40% and boosting user satisfaction by more than 30%.

3) Quiz Master Web APP - Team Project, Tech Stack: Html, CSS, JavaScript, React, Node Js

- Build an online quiz portal for VIT Bhopal students, earning an 'A' grade, boost learning efficiency by 40% and boost student engagement by 25% through interactive quizzes.
- Designed and implemented a real-time leaderboard function that tracks user performance on selected quizzes, leading to grew user engagement by 40% and enhancing overall satisfaction scores by 15%.
- Maintained a database of more than 100 quiz questions on various programming topics like C++, Python.

Technical Skills

Programming Languages: Java, C++, Python, JavaScript, TypeScript, SQL, HTML5, CSS

Technologies/Frameworks: React, Node JS, Express, Next JS, Zod, Tailwind CSS , Ajax

Developer Tools: Git, GitHub, Docker, Vercel, Firebase, Appwrite, MongoDB, PostgreSQL

Industry Certified Courses

- The Bits and Bytes of Computer Networking-Google:** Learned everything from the fundamentals of modern networking technologies and protocols to an overview of the cloud applications and network troubleshooting.
- Introduction to Front-End Development-Meta:** Completed the course produced by the software engineering experts at Meta—the creators of Facebook and Instagram, prepared for a career as a front-end developer.
- Cloud Computing -NPTEL:** This course introduced various aspects of cloud computing, including fundamentals, management issues, security challenges and future research trends. course.