Kushal Patel

Vadodara, India

EDUCATION

Nirma University 10/2022 - Present

B. Tech Computer Science and Engineering - Percentage - 8.23

Ahmedabad, India

Parth School of Science and Competition

Higher Secondary - Science - Percentage - 90%

06/2020 - 06/2022

 $Vadodara,\ India$

Vadodara, India

EXPERIENCE

Dhyey Consultancy 🗷

05/2024 - 07/2024

Machine Learning Intern

- Executed SQL queries on a music database, analyzing 10,000+ records to identify sales trends and track popularity across genres.
- Built detailed reports correlating track plays with sales, influencing promotional strategies.
- Improved marketing by leveraging analysis results to refine promotional tactics.

PROJECTS

01/2024

- Implemented a SaaS code editor with Next.js, Convex, Clerk, and TypeScript, supporting 10 programming languages, 5 VSCode themes, advanced filtering, personal profiles (execution history), a statistics dashboard, and customizable font sizes.
- Incorporated smart output handling, community-driven code sharing, and flexible pricing (Free & Pro) with Lemon Squeezy for payment processing.

Advanced Authentication MERN & Next.js

12/2024

- Built with MERN & Next.js for robust authentication, server-side rendering, and improved performance.
- Features secure user registration, JWT-based auth, OAuth (Google & GitHub), email verification, password resets, and protected routes.

Pneumonia Detection Web Application 🗷 | Python, TensorFlow, Streamlit, PIL

07/2024

- Developed a web-based pneumonia detection application using TensorFlow and Streamlit, enabling instant analysis and diagnosis from X-ray images.
- Trained on 624 X-rays (234 normal and 390 pneumonia) and tested on 4,816 X-rays (1,341 normal and 3,475 pneumonia), ensuring high accuracy and reliability.
- Created a user-friendly interface with robust file management and error handling; the model achieves around 85% accuracy in predictions.

Airport Management System 🗷 | SQL

04/2024

- Designed and normalized an ER diagram for an Airport Management System, transforming it into a relational model with 10 SQL tables and 100 records each to reflect real-world operations.
- Managed SQL connections and executed 30 queries for data manipulation, updates, and reporting, showcasing database management proficiency.

TECHNICAL SKILLS

Skills: Data Structures and Algorithms, Object Oriented Programming (OOP), Computer Networks, Operating System, Database Management System, Machine Learning

Languages: C, C++, Java, Python, SQL, HTML, CSS, JavaScript, TypeScript

Framework/Libraries: Numpy, Pandas, Matplotlib, Node.js, Next.js, ExpressJs, Tableau, Clerk

Operating System: Windows, Linux, Mac Database: MvSQL, MongoDB, Convex

Soft skills: Teamwork, Communication, Leadership

CERTIFICATIONS

- Machine Learning with Python
- Problem Solving
- SQL