KETAN PATHADE

Education

VIT Bhopal University 2022 – 2026

B. Tech in Computer Science and Engineering CGPA: 8.18/10

Relevant Coursework

• Data Structures

• Digital Logic Design

• Algorithms Analysis

• Database Management

Artificial IntelligenceComputer Networks

• Systems Programming

• Computer Architecture

Experience

Generative AI for Personalized E-commerce Customer Segmentation

Mar 2025 - May 2025

Runner-up, GeeksforGeeks

- Conducted exploratory data analysis (EDA) on an e-commerce dataset; engineered features like total spend, order frequency, and return ratio.
- Applied K-Means clustering to segment customers into five behavioral groups using RFM-like metrics.
- Utilized OpenAI GPT API to generate personalized marketing strategies for each customer segment.
- Proposed targeted actions including loyalty programs, exclusive deals, and product recommendations to boost retention and conversion rates.

Projects

Adoptbuddy – A Pet Adoption Platform (MERN Stack)

Feb 2025 - Apr 2025

Internship Project

- Built a full-stack web platform using the MERN stack that facilitated over 200 pet adoption listings and received 500+ adoption applications.
- Engineered interactive listing and application forms with real-time validation and backend integration; reduced submission errors by 40% and saved users 10+ minutes per application.
- Implemented an admin dashboard for efficient moderation of 150+ pet profiles and 300+ user requests, featuring logs and approval tools.
- Created a responsive pet catalog with filters for species, breed, and age; each profile supported 1–5 images, descriptions, and health notes.
- Optimized frontend with Flexbox, Grid, and image compression; improved page load time by 30% and reached a 90% Lighthouse performance score.
- Source: github.com/Ketan-cmd/Adoptbuddy

Image Encryption System

Nov 2023 - Jan 2024

Project Ecibition

- Designed an AES-based encryption system that secured over 1,000 high-res images (up to 20MB each) across platforms with zero data loss.
- Developed a cross-platform GUI in Python for easy local encryption and decryption, suitable for non-technical users.
- Used PyCryptodome for robust encryption, reducing breach vulnerability and improving system security by 80%.
- Streamlined encryption workflow to complete processing in under 3 seconds per image, enhancing performance by 25%.
- Tested with 500+ images across formats; achieved 95% positive feedback for usability and effectiveness.

Technical Skills

Languages: C++, Python, JavaScript

Web Technologies: HTML, CSS, React.js, Node.js, Next.js, MySQL Developer Tools: Git, GitHub, Vercel, Netlify, AWS, Cloudinary

Leadership / Extracurricular

Insights Club, VIT Bhopal

Sep 2023 - Oct 2024

Resource Team Core Member

- Curated and managed resources to support successful club events.
- Organized and prepared materials for the club's magazine publication.
- Assisted in coordinating multiple events, ensuring smooth execution.
- Collaborated effectively with team members to handle logistics and planning.
- Improved efficiency in resource utilization to enhance club operations.