

Rohan Vayase

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EDUCATION

Arizona State University Tempe, AZ

Master of Science in Computer Science

Aug 2025 – Present | Arizona, USA

Dr. Vishwanath Karad's MIT World Peace University

B. Tech in Computer Science and Engineering

Aug 2021 – May 2025 | Pune, India

- CGPA - 8.36/10.00

PROFESSIONAL EXPERIENCE

PEOCIT Software Solutions Pvt. Ltd.

Software Developer, Full Time

Jun 2024 – Dec 2024 | Pune, India

- Developed a robust, user-friendly website for Stock Market Portfolio Management System. Integrating real-time data through API's calls.
- Successfully integrated real-time data from stock market with 97% success rate.

Poona Switchgears Pvt. Ltd.

Data Analyst, Internship

May 2023 – May 2024 | Pune, India

- Leveraged Python-based data analysis tools to compile and interpret electrical data, driving improvements in manufacturing efficiency and cost reduction.
- Contributed to data-driven decision-making, boosting revenue growth in industrial electronic panel manufacturing.

PROJECTS

AI-Powered Document Summarizer & RAG Chatbot

- Built end-to-end Retrieval Augmented Generation system for summarization and document grounded chat.
- Integrated FAISS retrieval, Hugging Face/OpenAI LLMs, FastAPI backend, Streamlit UI and Docker deployment.

Scalable Image Classification API

- Developed FastAPI service with PyTorch ResNet models, fine tuned on CIFAR-100.
- Achieved ~79% Top-1 / 96% Top-5 accuracy.
- Added REST endpoints and Streamlit UI with Top-K probability charts.

Real-Time Face Mask Detection System

Tools used: Python, Pandas, OpenCV, TensorFlow, Deep Learning

- Trained a custom deep learning model using TensorFlow with CNNs for feature extraction, and implemented real-time face mask detection by integrating OpenCV for face detection and live webcam feed processing.

Flower Recognition System

Tools used: Python, TensorFlow, Convolutional Neural Networks (CNNs)

- Designed a system using Convolutional Neural Networks (CNNs) to identify flower species from real-time camera input or uploaded images.
- Implemented an efficient image recognition pipeline, combining real-time processing with accurate classification for practical applications in botany and biodiversity studies.

AI Chess Bot

Tools Used: Python, p5.js, MiniMax Algorithm

- Developed a chess-playing AI using the Minimax algorithm with adjustable difficulty levels for an interactive user experience.
- Utilized Python and p5.js to implement game logic, visualizations, and user interface.

SKILLS

- **Programming Languages:** - C++, Java, Python, C#, JavaScript
- **Web/Frameworks:** - FastAPI, Flask, Streamlit, Reactjs, Node.js
- **Machine Learning & AI:** - Computer Vision, Deep Learning Knowledge, Distributed Computing, Machine Learning Frameworks, NLP, RAG, FAISS
- **Data Science & Engineering:** - Data Science, Data Engineering, Statistics, Real-World Problem Solving, Analytical Thinking
- **Databases & Tools:** - SQL, MongoDB, Database Management Docker, Git, API integration, DSA, Innovation

PUBLICATIONS

Flower Recognition System using CNN

International Journal For Multidisciplinary Research

18 Nov 2024

COURSES

Machine Learning: AI, Python, & R+: Udemy

Aug 2024 – Oct 2024

Web Development: Udemy

May 2023 – Jul 2023

LEADERSHIP/EXTRACURRICULAR

Volunteer at Khelghar (NGO for Underprivileged children)

2021 – 2025 | Pune, India

Photography head of MIT-WPU Shutterbugs (Media Club)

2022 – 2024 | Pune, India