

# KEDAR SATHE

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📍 Pune, India

🌐 LinkedIn

🔗 Portfolio

🐙 GitHub

🔗 Leetcode



## EXPERIENCE

### Software Developer Intern

Unique School App India

Jan 2026 – Present  
Pune, India

- Developing an AI-powered React Native application
- Built an multi agent RAG system using LangGraph

### Open-Source Maintainer

Mermaid

Present

- Maintaining Mermaid.js, which is an open-source diagramming library that has more than 80,000 stars on GitHub and increased its functionality and community interaction.
- Resolved 8+ issues by debugging and correction, which enhanced diagram representation and compatibility.
- I also added a lot of pull requests, which added a new functionality and optimization to make the user experience more streamlined.

## EDUCATION

### SB College of Science, Aurangabad

Jun 2020 – Apr 2022

### B.Tech(Computer Engineering)

Vishwakarma Institute of Technology

Jul 2022 – Dec 2026

7.8 CGPA(current)

## SKILLS

### Programming Languages

C/C++, Python, JavaScript

### Cloud & DevOps

Google Cloud Platform (GCP), Linux/Bash scripting, Git & GitHub Actions, Docker, Kubernetes

### Machine Learning & Deep Learning

Data Science, ML/DL (PyTorch), Computer Vision

### MLOps & Data Engineering

MLOps, Data ETL & Preprocessing, ML Pipelines

### Generative AI & LLMs

LangChain, Hugging Face, LlamaIndex, Apache Spark

### Reinforcement Learning

Deep-Q-Learning, RLHF, RLAIF, LLM training & fine-tuning (Unsloth, PEFT)

## ACHIEVEMENTS

### Paper Published: Enhanced Railway Safety System

IEEE

### Eyantra 2023 (IIT Bombay)

Ranked AIR 1 in Stage 1; top 10 globally in Stage 2. - Link

### Paper Published: Social Distancing ID Card

- Published in a Scopus-indexed journal

### Paper Published: Alzheimer's Disease Diagnosis via SVM-Driven Classification of Structural MRI Data

- Published in IJRASET

### Certifications

- Google Cloud Computing Foundations - Link
- Natural Language Processing & Deep Learning - Certified by DeepLearning.AI - Link
- Fundamentals of Deep Learning - Certified by NVIDIA - Link
- Cybersecurity Workshop - Certified by Unstop - Link

## PROJECTS [GITHUB]

### Snakes & The Golden Apple

AI-Powered Snake Game

Stack : Python, PyTorch, Deep Q-Learning, Pygame, NumPy, Matplotlib.

- Made a Python Snake-based Multi-agent competitive game built on top of PyTorch, using Deep Q-Learning with Double DQN, Dueling DQN and Prioritized Experience Replay to play the game using an AI.
- Created a state space of 25D of snake directions, food location and distances, reward, +10 food, +2 proximity, -10 collision.
- Epsilon-greedy policy trained policy agents with a replay buffer of 50,000 experiences and Adam-based optimizer (lr=0.001) achieved 6070 percent win rates in 2,0005,000 episodes.
- Pygame visualization with enhanced training showed skill in reinforcement learning and multi-agent with persistence of model performance and tracking.

### Pelvix

Multimodal AI Chatbot

- Built a multimodal AI chatbot platform that supports both text and image generation, enabling dynamic, personality-driven conversations
- Integrated DeepSeek-R1 for real-time conversational responses and Flux for generating high-quality AI visuals
- Designed a retro-themed UI with three customizable themes; focused on privacy with no data storage, session-only chats, and no tracking
- Achieved 99.9% uptime, with image generation completed in under 10 seconds for over 95% of requests

### LocalRaG

Retrieval-Augmented Generation Application

Stack: Python, Streamlit, Docker, LangChain, PostgreSQL, Pg Vector

- Created an example of a Retrieval-Augmented Generation (RAG) system based on LLaMA 3 (70B), and a PostgreSQL vector store, which doubled the effectiveness in identification knowledge retrieval with zero hallucinations.
- Docked the app and created a user interface built on Streamlit, with speeds of less than 1s of response latency on a Server, to 90 percent of user queries.
- HNSW-based indexed version of PgVector, that makes search and retrieval of vectors 25% faster.