нивнам Катнор

८ +91-8319450574 ▼ Shubhamrathod1619@gmail.com 🛅 <u>shubham-rathod-821a01202</u> ♠ github.com/Rathod-shubhamm

EDUCATION

Vellore Institute of Technology, Bhopal

Integrated Mtech AI - 7.79

Aug 2021 - Aug 2026

Bhopal, Madhya Pradesh

Shree Shankar School

Class 12th - 78.0%, Class 10th - 86.40%

Mar 2017 - Mar 2020

Dhamnod, Madhya Pradesh

Technical Skills

• ML, Python, PyTorch, Agentic Workflows, React, SQL, RAG pipelines

PROJECTS

Agent AI coding assistant | Personal Project

Ongoing

- Developing an AI-powered coding tool using RAG % (Retrieval-Augmented Generation) to reduce hallucinations by 45% % through context-aware retrieval.
- Optimizing LLM prompts using the ReAct framework, % achieving 92% error-resolution accuracy in early user testing.
- Building a hybrid search pipeline with ChromaDB, % indexing 500+ code snippets and improving suggestion relevance by 35\% \% (measured via precision@k=3) to enhance real-time code generation accuracy.

NoCap RAG ☑ | Personal project

Feb 2025

- Developed an end-to-end Retrieval-Augmented Generation % (RAG) system combining LangChain, Pinecone vector % database, and OpenAI LLMs, improving factual accuracy % in generated content by 35%.
- Engineered a custom chatbot interface enabling users % to ask questions and receive context-aware responses % based on a large document corpus, reducing hallucinations % in LLM output by 40%.
- Optimized retrieval pipeline latency by 20% through % prompt engineering and indexing techniques, enhancing % real-time user query performance

Potato disease classifier Personal project

Sep 2024

- Built a full-stack web app to detect diseases in potato plants using leaf images, using CNN to achieve 95% accuracy with a processing time of 5 sec per image.
- Designed an intuitive React-based interface that enabled seamless plant image submissions, enhancing user experience and accelerating disease prediction turnaround by 30%.
- Deployed the model using TensorFlow Serving and FastAPI, resulting in a processing efficiency of under 5 seconds per image while maintaining high-performance accuracy rates. Download

Virtual INTERNSHIP

Data analyst intern

BCG X 🗗

Feb 2025 - Mar 2025

- Completed 5+ consulting case tasks involving data analysis and business process evaluation as part of a virtual internship.
- Analyzed and interpreted structured business data across 3 simulated client scenarios, producing 3-4 page written recommendations aligned with organizational objectives.

CERTIFICATIONS

•Data Analysis with Python - FreeCodeCamp

•Machine Learning with Python - FreeCodeCamp

• AWS Solutions Architect Associate

•Cloud Computing - NPTEL

EXTRACURRICULAR

Core Member

Jun 2023 - May 2024

Bhopal, Madhya Pradesh

- Served as a core member of the IoT Club, actively contributing to the organization of 5 successful events.
- Played a key role in team coordination, logistics, and knowledge sharing, fostering innovation and engagement.