Rekhansh Raje Deshmukh E-mail in linkedin op github op Portfolio Gurgaon, India op 491-8851-247599

EDUCATION

• Bachelor of Technology in Computer Science and Engineering

Vellore Institute of Technology (VIT), Bhopal, India

August 2021 – September 2026 (Expected)

• Higher Senior Secondary Education

80%

Ryan International School, Gurgaon, India

April 2020 - March 2021

PROJECTS

Scalable Phishing Detection Pipeline — Machine Learning for Network Security



- Engineered a modular ML pipeline in **Python** for data ingestion, validation against custom **YAML** schemas, transformation, and batch prediction.
- Utilized **Pandas**, **NumPy**, and **Scikit-learn** to perform efficient data manipulation, feature engineering, and train predictive models.
- Containerized the application with **Docker**, creating a reproducible environment that simplifies deployment across any platform.
- Integrated AWS S3 for scalable cloud storage of datasets and serialized models (using Pickle), enabling automated data persistence.
- Developed a user interface with Flask and Jinja2 to present model predictions and security alerts in an accessible format.

AI-Powered Psychological Support Chatbot



Technologies: React, Python, Jinja2, Ollama, Corrective RAG Framework

- Developed a full-stack AI chatbot to provide initial psychological support and analysis, focusing on generating safe and reliable responses.
- Implemented a novel Corrective RAG framework with Ollama on the backend to significantly reduce AI hallucinations and improve conversational accuracy.
- Automated the curation of a specialized 10,000+ item dataset using **Python** scripts, achieving a 75% reduction in manual data collection time.

CERTIFICATIONS

• Oracle Certified Data Science Professional

August 2025

• The Complete Agentic AI Engineering Course

2025

• First Certificate of English (FCE)(B2)

April 2022

SKILLS

- Programming Languages: Python, SQL, C++
- Data Science/ML: NumPy, Pandas, Scikit-learn, OpenCV, LangGraph, CrewAI, OpenAI Agents SDK
- Tools & Platforms: Microsoft Power BI, MongoDB, Requests, Selenium, SSIS, SSAS, SSRS, GitHub Actions, Docker, AWS, MLflow, Apache Airflow,n8n

EXTRACURRICULAR ACTIVITIES

• Smart India Hackathon Internal Finalist

March 2024

• Cyber Warrior Club – Research and Development Team Lead

PUBLICATION

• Rekhansh Raje Deshmukh, Dr. Ajay Kumar Phulre. "Deep Learning-Based Detection of Oryza sativa Crop Diseases: A Focus on Bacterial Blight, Explosions, Brown Stains, and Tungro." *Under review, expected 2025.*