Harsh Joshi

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SUMMARY

AI/ML developer proficient in TensorFlow and PyTorch, with expertise in computer vision and NLP. Experienced in model deployment and MLOps practices, utilizing tools such as OpenCV, Flask, and cloud platforms.

SKILLS

AI/ML/MLOps : Tensorflow, Transformers, Scikit-Learn,OpenCV | Docker, Prometheus, Graphana, WhyLabs, MLflow

Web Development: React, Node.js, Flask, Django, FastAPI, HTML/CSS,

EXPERIENCE

Data Science intern

Agri Spectra AI **October 2024 – May 2025, Remote**

- Built machine learning models for plant disease detection using hyperspectral data (512×512×204), improving classification accuracy by **~18%.**
- Processed and managed **100K+** TIFF images across **117** classes with custom Python scripts and preprocessing pipelines.
- Collaborated on a private **Hugging Face dataset repository**, managing data versioning and enabling secure API-based access.
- Used MLflow to track and compare experiments, improving reproducibility and workflow efficiency by **30%**.
- Developed an MVP web application using React and Node.js to visualize **NDVI, SSM**, and weather data for agricultural insights; integrated Firebase for **real-time data sync** and deployed on Google Cloud Platform (GCP).

PROJECT

Smart Answer Evaluator

smart-answer-evaluator.onrender.com/

- Developed a deep learning model that can compare the ideal answer with the student's answer and classify it into three classes: partial, correct, or incorrect.
- Further develop a formula that uses the probabilities of each class to determine the marks.
- Use the BERT architecture as the foundation and further customize it for paired text inputs.
- Used Transformers and TensorFlow to build the model, and Flask for the backend of the project.

VLC Media Controller Using Hand Gestures

drive.google.com/file/d/10LSHdoqwn8hS7JuwRlFm74gg8RKY2n-A/view

- Developed a deep learning model that classifies hand gestures using VGG16 as the base model with an accuracy of 95%.
- Integrated the gesture recognition system with the VLC API to control playback functions such as pause/play, next, previous, volume up, and volume down.
- TensorFlow for model development, OpenCV for real-time gesture tracking, and Tkinter to create an intuitive GUI.

Diabetes Detector

diabetes-predictor-ankmxawcztpjgcsmlkyybw.streamlit.app/

- This machine learning model, deployed on Streamlit, predicts whether a user has diabetes.
- It utilizes features such as smoking history, hypertension, heart disease, glucose level, etc.
- Logistic regression, implemented using scikit-learn, is employed to illustrate the likelihood of diabetes with an impressive accuracy of 92%.

EDUCATION

Bachelor of Engineering in Electronics and TeleCommunications

D.Y. Patil college of Engineering • Akurdi , Pune • 2026

CERTIFICATIONS

MLOPs Bootcamp : AI Operations For Success

Udemy • 2024

Deep Learning Masterclass with Tensorflow

Udemy • 2023