Shubham Kumar

New Delhi
+91 7004607560
shubham04689@gmail.com
https://shubhamportfolio-ashy.vercel.app/
Linkedin:
https://linkedin.com/in/shubham04689/
Github:
https://github.com/Shubham04689

Languages

Python

SQL

Javascript

Skills

Frameworks:

TensorFlow, PyTorch, Flask, Django, Pandas, Numpy, Scikit-Learn

AI/ML:

NLP, Text Analysis, Language Modeling, OpenCV, Machine Learning Algorithms

Tools:

Pytest, cProfile, Pylint, CI- CD Pipileines

Interests

Exploring the intersection of AI and humanity, with a passion for continuous learning in emerging AI technologies like Explainable AI and Edge AI

Certifications

PG Certification
Talent Sprint, in AI /ML Executive training
Sep 2024
https://talentsprint.com/iiit-hyderabad

Education

DIT University
Mechanical Engineering
5.65/10
2016-2020

IIIT Hyderabad
Artificial intelligence and Machine learning
71.11%
2023-2024

Summary

Motivated AI/ML developer with extensive experience in Python, TensorFlow, and PyTorch. Demonstrated success in deploying machine learning models in real-world applications, optimizing model performance, and automating processes to improve efficiency by 20-30%. Skilled in building scalable solutions, including RESTful APIs and web applications

Experience

Freelance Python Developer **Sep 2023 – Present**
Developed and deployed custom software solutions, with a focus on improving system performance and efficiency Delhi

- **API Development:** Developed 10+ RESTful APIs using Flask, reducing API response time by 20% and improving system reliability.
- **Automation:** Automated data scraping using Selenium and BeautifulSoup, reducing manual effort by 30% and speeding up data collection processes.
- **Machine Learning:** Implemented data analysis and ML models using Pandas and scikit-learn, increasing project accuracy by 15%.
- **Code Quality:** Ensured code reliability through Pytest and version control using Git, maintaining a 95% pass rate on test cases.

Projects

NLP Text Classification Model **July 2024**

- Built and deployed an **NLP** text classification model using **BoW** and **Word2Vec** for text representation. Conducted web scraping and preprocessing with **scikit-learn** and **NLTK**, achieving an **85%+** classification accuracy. Integrated the model into a production system, enhancing document analysis capabilities.

Image Recognition System

- Developed an image classification system using **CNN** with **TensorFlow**, achieving **90%+** accuracy in real-time image categorization. Optimized the system for scalability, reducing latency by **15%**

Speech-to-Text Conversion Tool

- Created an application that converts speech into text using deep learning models for natural language processing.
- Implemented using PyTorch and integrated into a web application via REST APIs.

Face Detection System

- Built a face detection system using deep learning algorithms, leveraging **OpenCV** and **TensorFlow** for real-time face identification.
- Optimized the system for performance on edge devices, achieving high accuracy and low latency in detection.

Machine Learning & Data Analysis: **Sep 2024**
Developed and implemented various machine learning models and techniques using Python in Google Colab
https://github.com/Shubham04689/colab_notebooks

Bagging Classifier KMeans Clustering SVM Classifiers (Breast Cancer, Penguins) KNN Decision Trees and Perceptron (Iris dataset).

Dimensionality Reduction & Clustering **Oct 2024**
Worked with Isomap, t-SNE, and Hierarchical Clustering for unsupervised learning tasks and data visualization
https://github.com/Shubham04689/colab_notebooks

React + Vite Development: **Oct 2024**

Set up minimal React projects with Vite, integrating plugins for Fast Refresh using Babel and SWC, and followed ESLint rules for code quality

Agent-based Systems **Oct 2024**

Developed **Python**-based agent systems involving agent management, **swarm** testing, and configuration, ensuring high performance and modular architecture.