Yadukrishna giri

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Summary

A motivated individual with a background in data science and artificial intelligence, combining strong analytical skills with creative problem-solving. I thrive in environments that challenge me to innovate and deliver impactful solutions. With practical experience in machine learning, computer vision, and data analysis, I am ready to contribute to meaningful projects while continuously learning and adapting to new technologies.

Links

- **Github:-**https://github.com/yadukrishnagiri
- **Portfolio:-**https://yadukrishnagiri.github.io
- **Linkedin:-**https://www.linkedin.com/in/yadukrishnagiri

Education

SRM University, Delhi-NCR, Sonipat | 7.8
B.Tech | 08/2025
Computer Science and Engineering with specialization in Data Science and Artificial intelligence

SNM Higher Secondary Higher Secondary School | 99%
PCMB | 05/2021

Skills

Python, Computer Vision, Facial Recognition, Predictive Modeling, Data Visualization, Problem Solving, Ollama, LangChain

Certificates

Machine Learning with R, IBM Introduction to Python, IBM Cloud Application Developer, Artificial Intelligence Analyst

Experience

SKOLAR
intern | 10/2022 - 11/2022

1. Developed an AI-based face detection program using Python and OpenCV, showcasing practical application of computer vision techniques.
2. Enhanced understanding of machine learning algorithms by applying them to real-world projects.
3. Worked with Python libraries like NumPy, SciPy, and Pandas to analyze and visualize data effectively.
4. Gained exposure to end-to-end project development, from ideation to deployment, fostering a holistic technical perspective.

Projects

Retrieval Augmented Generation (RAG) System

- Developed a Retrieval-Augmented Generation (RAG) System using Python, integrating multiple document types (PDF, CSV, Word, Images) with advanced text processing and embedding techniques
- Implemented a Flask-based web application with a robust query interface, supporting multi-modal document indexing and semantic search capabilities
- Utilized machine learning libraries including LangChain, Chroma, and Ollama to create an intelligent document retrieval and question-answering system
- Engineered a flexible data ingestion pipeline with error handling, supporting document processing from various sources using OCR, text extraction, and embedding technologies

Face Recognition and Image Capture Project

- Developed a computer vision application using OpenCV and TensorFlow for facial detection and recognition, implementing custom image collection and classification workflows
- Implemented automated image capture functionality with dynamic directory creation, enabling the systematic collection of facial training data with built-in collision prevention
- Created a machine learning model integration script that performs real-time face detection, classification, and probability prediction with graphical overlay and visualization
- Designed a flexible face recognition system capable of identifying multiple individuals with configurable confidence thresholds and interactive termination controls

Eye-Controlled Mouse with Computer Vision

- Developed a real-time mouse control application using MediaPipe and OpenCV, implementing facial landmark tracking for hands-free cursor navigation
- Implemented advanced computer vision techniques to map facial landmarks to screen coordinates, enabling precise mouse movement through facial tracking
- Created an innovative interaction mechanism using eye blink detection for mouse click functionality, demonstrating complex gesture recognition in human-computer interaction
- Engineered a robust video processing pipeline with frame conversion, landmark extraction, and dynamic screen coordinate mapping using Python libraries

Global Happiness Data Science Project

- Conducted comprehensive data analysis of World Happiness Report 2018 using advanced Python data science libraries, including Pandas, Matplotlib, Seaborn, and Plotly
- Developed predictive linear regression model with Scikit-Learn to analyze socio-economic factors influencing happiness scores, demonstrating statistical modeling expertise
- Performed in-depth statistical analysis using Statsmodels, generating OLS regression insights and correlation matrices to identify significant happiness predictors
- Created interactive choropleth maps with Plotly to visualize global happiness distribution, enabling geographic trend identification and comparative analysis.

Languages

English, Hindi, Malayalam, Tamil