Aditya Vardhan

Summary

Passionate software developer with expertise in C++, Python, and JavaScript, specializing in machine learning, computer vision (YOLO, OpenCV), and backend development (Node.js, MongoDB). Proven experience in real-time AI applications, automation (RPA), and full-stack development, with a strong foundation in data analysis and cloud computing. Demonstrated leadership in hackathons, research projects, and software solutions, with a focus on innovation and problem-solving.

Technical Skills and Interests

- **Programming:** C++, Python, JavaScript, HTML
- **Developer Tools:** Git, GitHub, VS Code, Docker, AWS
- AI/ML: TensorFlow, PyTorch, OpenCV, Numpy, Pandas, Scikit-Learn, Hugging Face
- NLP: NLTK, SpaCy, BERT, LLMs
- Soft Skills: Problem Solving, Adaptibility, Event Management, Networking, Teamwork, Technical Documentation

Projects

• Assistive and Navigation Model for the Visually Impaired and Elderly People

Github **(7)** *Nov-2024*

Designed a YOLO-based model to identify objects in **real-time**, optimizing it for visually impaired users.

Tech Stack

- **Programming Language:** Python
- Libraries: ultralytics (YOLOv8), OpenCV, speech_recognition, pyttsx3, threading for real-time synchronization.
- -Implemented YOLOv8 for real-time object detection and tracking.
- **Developed** distance estimation and directional guidance features for spatial awareness.
- Integrated voice commands and audio feedback for interactive navigation.
- **Optimized** for cross-platform use with real-time synchronization and performance.

• AI-Powered Resume Scanner

Github (7)
in progress

--Developing machine learning-based system to analyze resumes and match them with job descriptions.

- Utilizing Scikit-Learn, TF-IDF, and NLP techniques to extract and classify relevant skills and experience.
- Implementing text processing techniques using NLTK and SpaCy for keyword extraction and matching.
- Building a ranking model to assess resume-job description similarity using cosine similarity and ML algorithms.

Education

- Bennett University

 $2022 ext{-}present$

 ${\bf B.Tech~CSE}$

CBSE Certified (10th 12th) — Central Board of Secondary Education

CPI: 7.79

Position of Responsibility

- Team Lead Smart India Hackathon
- Co-Management Head Robotics Process Automation (RPA)

Certifications

- Improving Deep Neural Networks

2023

Learned advanced techniques for optimizing deep neural networks, including hyperparameter tuning, batch normalization, and regularization.

Coursera

Introduction to Artificial Intelligence (AI) – IBM

2023

Gained expertise in ML algorithms, data preprocessing, and model evaluation.

Coursera

Coding Profiles:

⟨◆⟩ LeetCode Profile: Aditya_1441

■ GeeksforGeeks Profile: adityathegeek