Aditya Balodi

Education

Graphic Era Hill University, Dehradun

2020 - 2024

Bachelor of Technology in Computer Science & Engineering

Graphic Era University, Dehradun

2024 - Present

Master of Technology in Computer Science & Engineering

Projects

Presence

- A Smart Attendance capturing Android App developed in Kotlin which uses Facial recognition and Geo-fencing for marking attendance.
- This App was developed for the Smart India Hackathon 2022 and our team was placed in the Top 2 and the official Runner ups.
- This app uses TensorFlow lite Face-net model for facial recognition which uses a Deep Convolutional Neural Network with an accuracy of 99.82 per cent in recognizing a face and Google Map API for Location and Geo-Fencing.
- Link: https://github.com/Adity-a/Presence

Brahmi (brahmi script) Character recognition using OCR

- A Brahmi character recognition using tesseract ocr engine which extract the brahmi characters from a preprocessed image using language model created.
- This is an android application which uses android Tess-Two offline API for extraction of characters and there is a conversion algorithm used to convert the extracted text to Devnagari Hindi.
- Link: https://github.com/Adity-a/Brahmi Recognition

Virtual Mouse

- A virtual mouse which uses right hand for using cursor in computer with the help of the camera input, it uses hand detection and finger movements using preexisting coordinates and provide input for the cursor.
- This program consists of Open CV for video frame processing and provides consistent tracking of hand for better accuracy.
- Link: https://github.com/Adity-a/Al_Virtual_Mouse

Technical Skills

Programming Languages: (C, C++, Python, Java, Kotlin)

Tools & Technologies: Android Studio, VS Code, OpenCV, TensorFlow, SQLite, Linux, Firebase

Expertise: Machine Learning, Computer Vision, Deep Learning, Data Structures & Algorithms

Achievements

- Qualified for the prestigious "Smart India Hackathon 2022 Grand finals".
- Placed Top 2 of Problem Statement SK794 in Smart India Hackathon 2022 Grand finals.
- Selected for Al 2.0 Hackathon conducted by Yamaha at Chitkara University.
- Selected in top 12 from 105 teams all over India.

Publications

- 1. P. Kimothi, A. Balodi, P. Rawat, D. Rawat, S. Vats and V. Sharma, "Optical Character Recognition of Bhrami Script using Tesseract," *2024 Asian Conference on Intelligent Technologies (ACOIT)*, KOLAR, India, 2024, pp. 1-5, doi: 10.1109/ACOIT62457.2024.10939818.
- C. Bhatt, A. Balodi, R. Chauhan, A. P. B. P and T. Singh, "An IoT-based Heavy Vehicle Parking and Accident Avoidence System for Smart Cities using CNN," 2023 International Conference on Communication, Security and Artificial Intelligence (ICCSAI), Greater Noida, India, 2023, pp. 643-646, doi: 10.1109/ICCSAI59793.2023.10421475.

Strengths

- Team Collaboration and Leadership
- Analytical and Problem-Solving Skills
- Goal-Oriented and Dedicated

Hobbies

- Yoga
- PC Games
- Roller Skating