Soni Reddy Maram

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EDUCATION

National Chung Cheng University — Mar. 2022 - July. 2024
Master of Science in Electrical Engineering; GPA: 3.7 — Chiayi, Taiwan

Sv College of Engineering — July. 2018 - July. 2021
Bachelor of Technology in Computer Science and Engineering; CGPA: 7.6 — Tirupati, India

St. Mary's Women's Engineering College
Technical Diploma in Computer Engineering; Per: 83.41

EXPERIENCE

CodSoft — Aug. 2024 - Sep. 2024
Machine Learning Internship — India

- Development of Machine Learning-based Algorithms
- Deployed of Machine Learning models for Various Detection Problems

PROJECTS

Hostel Management System

- Hostel Management is a software developed for Managing various activities in the hostel.
- For the past few years, the number of educational institutions has been increasing rapidly. Thereby the number of hostels is also increasing for the accommodation of the students studying in this institution.
- This particular project deals with the problems of managing a hostel and avoids the problems that occur when carried out manually.

Hand Gesture Control Robot

- A robot was conceptualized and created to be operated via hand gestures, utilizing sensor technology and programming to facilitate an intuitive interaction between humans and machines.
- This project involves integration of hardware, the development of software, and the implementation of real-time motion tracking to ensure the execution of commands in a seamless manner.

Encryption System Design Based on DES and SHA-1

- Developed and executed a robust encryption framework utilizing the DES algorithm for data encryption and SHA-1 for integrity assurance.
- The system on hand uses the triple DES and RSA algorithm for data encryption to hide, on the other hand, the SHA-1 algorithm to validate the integrity of data has a wide range of practicalities

Bank Anomaly detection using FT-YOLOv8 and Channel-Wise Attention in 3D-CNN

- In this Project, I proposed a deep learning-based approach for anomaly detection in banks using FT-YOLOv8 and Channel-Wise Attention 3D-CNN.
- FT-YOLOv8 trains models for mask and weapon detection, whereas Channel-Wise Attention mechanisms are integrated into the 3D CNN to capture complicated spatiotemporal patterns indicative of violent behaviors. To this end, this research created a dataset comprising diverse scenarios involving individuals wearing masks, carrying weapons, and engaging in simulated violent activities.It then trained the proposed models on this dataset and evaluated their performance through rigorous experiments.

TECHNICAL SUMMARY

- **Programming Languages:** Python, C/C++,HTML/CSS, Javascript
- **Applications:** Image Classification, Object Detection, Image Captioning
- **Packages –** Pandas, NumPy, PyTorch, TensorFlow