

Manasi Sonawane

Electronics and Telecommunication

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DATE OF BIRTH:10/06/2003

Skills

HTML
Data visualization
Machine learning /AI
Deep learning
Analog and digital Electronics
Event Planning
Teamwork and Collaboration
Communication
Organized and Efficient

School Name: DSK School, Pune

College Name: Cummins college of Engineering

Education

Projects

1 Building machine learning model to predict the Quality of Milk

- Developed a machine learning-based model utilizing Decision Trees algorithm to accurately predict the quality of milk, distinguishing between high, medium, and low quality samples.
- Conducted data collection, processing, and model fitting, followed by testing dataset analysis to assess model accuracy. Pruning of decision tree was performed to enhance model performance by removing unnecessary nodes.
- Achieved competitive performance compared to alternative

machine learning algorithms such as Naive-Bayes, with our model demonstrating high accuracy. Results underscore the effectiveness of machine learning techniques in milk quality prediction, highlighting Decision Trees as a suitable algorithm for real-world applications.

2 Two wheeler vehicle Theft detection

Implemented a sophisticated vehicle theft detection and notification system utilizing a LPC2148 microcontroller as the central processing unit. Integrated GSM, GPS, and Bluetooth modules to enable remote communication and tracking, enhancing vehicle security. Developed algorithms for real-time monitoring of the vehicle's security status using a vibration sensor and LCD display. Demonstrated expertise in hardware interfacing, sensor integration, and software development to create a robust solution for vehicle security and recovery.

3 Driver Antisleep Device

I led the development of a Driver Antisleep Device, aimed at combating the dangers of drowsy driving prevalent in modern times. This innovative system, equipped with an eyeblink sensor, Arduino Nano, and other essential components, effectively detects signs of driver drowsiness in real-time. By implementing an alarm system triggered upon detecting drowsiness, the device provides timely alerts to drivers, potentially preventing accidents and saving lives. This project showcased my ability to innovate and apply technology to address critical safety concerns, demonstrating my proficiency in project management, problem-solving, and technological implementation

4 Speech recognition using correlation

- Developing a customized Speech Recognition system with pre-stored audio files.
- Recognize the human speech for security and identification purpose.
- Implementation of speech recognition using correlation technique.

Volunteering

Volunteered with Drishti Foundation, actively participating in community service initiatives such as cloth distribution drives and river cleaning projects. Collaborated with team members to organize and execute activities aimed at improving livelihoods and promoting environmental conservation. Demonstrated strong communication, teamwork, and leadership skills while contributing to fundraising efforts and engaging with the community.