Akash Thota

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EDUCATION

RGUKT NUZVID
B.Tech in ECE
Expected July 2023
Cum. GPA: 7.7
{till 4th Semester}

LINKS

- g00g1y5p4
- g00g1y5p4
- g00g1y5p4
- g00g1y5p4.github.io

COURSEWORK

- Algorithms
- OOPS in C++, Python, Java
- Data Structures in C/C++, Python, Java
- Discrete Mathematics
- Linear Algebra
- Probability and Statistics

TECHNICAL SKILLS

SKILLS
- Machine Learning • Deep Learning
- Image Processing • Computer Vision
- Data Science • Android Development
- Web Backend

LANGUAGES
- Python • Java • C • C++
- JavaScript • C/CSharp • Bash
- Matlab
Familiar with :
- Flutter • Go • React
- PhP • SystemC, Verilog

FRAMEWORK
- Tensorflow • Keras • Opencv
- SKlearn • Numpy • Pandas
- Flask • ReactJs • Flutter

TOOLS
- Colab • Android Studio • VScode

CLOUD
- Microsoft Azure

OS EXPERIENCE:
- Linux Kernel v3.11 - v5.* • Windows
- Angstrom

EXPERIENCE

ELITE TECHO GROUPS |Autonomous Driving Internship cum Trainee
June 2021 - August 2021, Online
- We work alongside machine learning algorithms which are used to develop artificial intelligence programs which are used to take autonomous driver decisions.

PROJECTS

VEHICLES ANTI-THEFT SOLUTION USING DE10NANO   **blog**
[semi-finalists,internationals, conducted by terasic, intel]
Deep Learning | ImageProcessing | ComputerVision | Android | Web
•Daily, Globally 1000's vehicles are got stole. After a lot of research and doing data analysis we figured out 5 ways to stop thieves from any way of stealing vehicles. To alert the owner, we created this user-friendly and reliable system that was used to catch thieves within seconds using FPGAs and cloud communication. Since the device warns instantly with GPS location, images of thieves' and the situation. Things become so easy to catch thieves by police.

DEPTH ESTIMATION OF A POTHOLE ON ROADS   **blog**
[finalists,nationals, conducted by government of india]
Deep Learning | Image Processing | Computer Vision| Android | Web
- In India, most people lose their lives because of road accidents, and in road accidents, one of the main reasons is road infrastructure. So we detect potholes in different climate conditions and in various situations. Though we estimated their approx depth when they were filled with water or not (in night times also). After we store the properties of potholes with GPS location. By storing this data we can give suggestions in maps to reach the destination safely.

DRIVER DROWSINESS DETECTION   **blog**
Image Processing | Computer Vision | Android | Web
- Many road accidents occur with drives negligence also. One of the reasons is drive's drowsiness. So we decided to alert the driver of drowsiness when he/she falls asleep. Using computer vision with deep learning, we have achieved our final result. By detecting facial nodal marks, we can extract the eye's data. Using Image processing techniques we calculated whether the driver is going to sleep or not. If yes, we alert him using the vehicle's speaker with Bluetooth or by vibrating or playing sound on the driver's mobile.

VEHICLE ACCIDENT DETECTION   **blog**
GyroScope | Accelometer | Android | Web |
- Most of the victims lost their lives cause nobody inform to hospitals within time. So we decide to create an application, that monitors the position of the vehicle 24x7. We use the accelerometer, so if an accident occurs, the position of the vehicle must change. Using that big corrects in very small periods, we send within seconds using our developed application and based on victims' information, we will inform the scenario to relatives, police, and nearby hospital with GPS location.