Aswin R

Student

My interest are Robotics,Computer Vision, and Machine Learning.

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Chennai, India

18 November, 2002

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EDUCATION

Study Program
Vellore Institute of Technology

07/2020 - Present *Chennai*

Courses

- BTech, Electrical, Electronics and Communications Engineering

WORK EXPERIENCE

Avionics Engineer
Team Aviators International

11/2020 - Present *Chennai*

The Official Aero modelling team of VIT Chennai, to make and Build micro class planes and drones and compete with other teams in competitions.

Robotics Researcher
HCL Technologies

11/2021 - 06/2022 *Chennai*

Avionics Lead
Team Aviators International

11/2022 - Present

Project Intern
Robert Bosch Centre for Cyber-Physical Systems @ IISc

07/2022 - Present

Achievements/Tasks

- We are developing an autonomous chemistry lab assistant with a KUKA IIWA 14 R820 manipulator and mobile base. The system will be equipped with advanced sensing and perception technologies, and sophisticated algorithms and software to enable it to autonomously plan and execute experimental protocols

Co-Founder
ACK Robotics

07/2022 - Present

SKILLS

As an engineer and programmer, I am skilled in Python, C++, and Java. I am proficient in machine learning frameworks such as Keras, TensorFlow, PyTorch, and scikit-learn. I also have experience in robotics and avionics design and engineering, as well as a strong background in machine learning and computer vision. Overall, I am a meticulous problem solver with strong communication skills and the ability to collaborate effectively with cross-functional teams.

PROJECTS

TDS-Meter
- This project is used to measure the Total Dissolved Solid Contents in a solvent and present the output into a serial monitor via Arduino.

p2p-planned-motion-control
- To move bot from point to point,with a user defined line that uses Visual PID* auto-correction and gyro optimizations.

Arrhythmia Classification with DCNN using ECG signals
- My project involves the use of a Deep Convolutional Neural Network (DCNN) with attention layers to improve the accuracy of arrhythmia classification in ECG signals from the MIT-BIH dataset. This approach allows the model to learn and focus on relevant features and patterns within the ECG signals, leading to improved classification performance.

Design of Shark Detection and Decoy Buoys
- https://ieeexplore.ieee.org/abstract/document/10053408

ORGANIZATIONS

Team Aviators International (11/2020 - Present)
Avionics Lead

HCL Technologies (11/2021 - 06/2022)
Robotics Researcher

Robert Bosch Centre for Cyber-Physical Systems @ IISc
Project Intern

CERTIFICATES

ROS for Beginners: Basics, Motion, and OpenCV
Udemy

AWS Educate Machine Learning - DeepRacer (08/2022 - Present)
Amazon Web Services (AWS)

Machine Learning Pipelines with Azure ML Studio
Coursera

Robotics Research Intern
HCLTech