Uday Girish Maradana

DOB: 7/7/1997 Gender: Male ♂

Contact Information

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Objective

I am looking to develop my expertise in new concept development, simulation and validation within a forward thinking organisation.

Interests

Robotics, Software Engineering, Aerial Systems, Mechanical Engineering

Education

National Institute of Technology, Calicut, Kerala-673601. India (July 2015 – present)
B.Tech(Mechanical Engineering) (GPA 6.26/10)
Narayana Junior College, Visakhapatnam, Andhra Pradesh,India (July 2012 - July 2014)
Intermediate(11th and 12th) (Percentage 97.2 %)
St.Anthony's School, Visakhapatnam, Andhra Pradesh-530027. India (July 2011-July 2012)
SSC(10th) (GPA 9.5/10)

Skills

Programming and Scripting Languages: C, C++, Python, HTML, MySQL.
Operating Systems: Windows, Linux, ROS.
Tools: SolidWorks, MATLAB, Octave, Arduino, Proteus, Gazebo, Rviz, Ansys, FluidSim, Master-Cam, OpenCV, CREO, R, MS-Office, COMSOL, Google Cloud Platform, AWS.
Technologies: Machine Learning, Artificial Intelligence,Computer Vision,Speech Recognition, NLP, Control Systems,Neural Networks, Network Security, Pneumatics, GPS- GSM Systems, Raspberry Pi, Genetic Algorithms, ARM.
Research Skills:Advanced Drone Systems, Artificial Intelligence, Robotics, Human-Computer Interaction, Quantum Physics.
Other Skills: Leadership, Research, Public Speaking, Strategic Planning, Project Management.

Courses Completed / Certifications

Machine Learning by Stanford University on Coursera.
Certificate Link : https://www.coursera.org/account/accomplishments/certificate/8SFSENT9M7PB
Neural Networks and Deep Learning by deeplearning.ai on Coursera.
Certificate Link: https://www.coursera.org/account/accomplishments/certificate/4A322TCHNMLS
Sequence Models by deeplearning.ai on Coursera.
Electives: Control Systems Engineering,Introduction to Robotics,Image Processing,ANN and GA.

Positions of Responsibility

Crew Member at **Robotics Interest Group - NIT Calicut** (May 2016 – Present)

Projects

Cloud based video surveillance system (May 2018 – Present)
Development of an Object Detection and live video surveillance system using Google Cloud Machine Learning Platform.

Knee Rehabilitation System (July 2018 – Present)
We are trying to design and fabricate a device with 2 DOF mechanism which can be used for performing Flexo-extension exercises which will be used for Knee rehabilitation purposes.

Jasper (May 2018 – Present)
Complete framework for the development of an Interactive Semi-Humanoid Robot using technologies

like AI,NLP,ROS,SLAM.

Quadcopter (May 2016 – Present)
Version 1: Quadcopter based on Arduino Mega 2560 and IMU, with PID control Algorithm.
Version 2: Quadcopter based on APM 2.8(Flight controller)with GPS Module which is capable of performing Autonomous Flight operations.
Version 3: Working on Coordination among two quadcopter to acheive a basic level of swarm.

Riggu (Jan 2017 – Dec 2017)
It is a robot which has capabilities like Image Processing, Speech Recognition. It is an Interactive Robot which is made on Raspberry Pi platform based on Python, OpenCV, PSphinx and e-speak.

Four wheel steering system (Jan 2018 – April 2018)
We are a team of three members worked on this project involved submission of a fabricated model as a part of our course programme.In this project we used a mechanism to orient the four wheels in such a way which enables the automobile to take a sharp turn with minimum radius of curvature.

Robocon Bot (Sep 2016 – March 2017)
A manual bot which can throw disks at specified positions which was made by our Robotics Interest Group for National level Robotics Competition called Robocon- 2017.

Hexacopter (Feb 2018 – May 2018)
A hexacopter was made based on ARM and controlled manually. PID tuning was done for the stability. This project involves the testing and performance analysis of hexacopter on PID and backstep algorithms.

GUI For Library Automation (Mar 2018)
This project involved working on python and tkinter to develop a basic graphical interface for automation systems.This was tested with a library automation system.

GSM-GPS Guided Bot (Jan 2016 – Apr 2016)
A four wheel mobile robot which can move from one specified location to another with the help of GPS and GSM modules.

Events and Workshops

- Paritcipated in NiTCkathon.Ai which is an AI based hackathon conducted by JMR Infotech at NIT Calicut. Worked on Amazon Alexa Skill Development as a part of this hackathon.
- Participated in National Level Robotics Competition with team of 20 Members. Event: ROBOCON 2017 Place: Pune, Maharashtra Date: 2nd to 4th March 2017
  Role Played: Mechanical design and fabrication of manually controlled Robot.
- Volunteered 2 day workshop on Basic Introduction to Robotics to college first years.
  Role Played: Explained the software and gave introduction to Pneumatics,various field of robotics and explained how to code a Line following robot and Obstacle Detection Robot.
- Attended a short-term programme on Research Methodology in Science, Energy and Management held at NIT Calicut.
- Participated in India design Contest(conducted by DST, Texas Instruments,Startup India).
- Attended a full day session on Startup and IPR Awareness Program held at NIT Calicut.
- Attended a seminar on Innovations in Space Technology held at NIT Calicut.

Languages

Telugu,English,Hindi

Hobbies

Reading Books,Listening Music.