AKASH CHAUTE

@ Gmail LinkedIn Github 9405217490 Portfolio Website

PROJECTS

Prayaas Social Club Website

Collaborative Project Link

March 22 - April 22

- Developed a dynamic website for a social club at college that will facilitate communication and engagement between members and society.
- Designed the website using React Js and CSS to showcase upcoming events, photo galleries, and member profiles. Utilized a responsive design to ensure compatibility across various devices.

Voice Assistant

Self Project GitHub

December-2022

- Designed and implemented a Python-based voice assistant game that allows users to interact with a virtual assistant via voice commands and receive output in text format.
- Incorporated various features like reading audiobooks, surfing on Wikipedia, opening different sites, etc.

Motion Planning

IvLabs, VNIT GitHub [Video]

December 21 - May 22

- Implemented the A-star path planning Algorithm on a custom differential drive the mobile robot in a custom Gazebo environment.
- Designed a path follower using a PID controller for the bot to follow the path generated by A-star.
- Extended the A-star Algorithm to receive a smooth path using RDP and B-splines algorithms.

Quadcoptor Trajectory Follower

IvLabs, VNIT GitHub [Video]

July 21 – October 21

- Implemented a PID-based controller to follow Trajectories, including Hovering at a particular height, Straight line, Sine Curve, and Helix curve.

MINI PROJECTS

The Dice Game

GitHub [Video]

Developed a web-based dice game that allows players to test their prediction and luck skills by placing bets on the outcome of a dice roll in React JS. Incorporated the CSS using Chakra UI.
Resulted in an engaging and exciting game for players to enjoy.

Tic-Tac-Toe(CPP)

GitHub

Developed a Tic-Tac-Toe game. A simple game of 2 players played on a 3X3 board.

Extended Kalman Filter

GitHub

Implemented the Extended Kalman Filter on a unknown map, which estimated the trajectory of a vehicle using odometry, range and bearing measurements using the LiDAR sensor mounted on a vehicle.

Path Planning

GitHub

Worked on a global path planner algorithm to find the shortest path between two points using A-star Algorithm.

EDUCATION

Visvesvaraya National Institute of Technology

B.Tech in Mechanical Engineering
CGPA: 8.36/10 Grade Card

December 2020 – May 2024(expected)

Nagpur, India

TECHNICAL SKILLS

Data Structures and Algorithms
C/C++ Python React JS
HTML CSS JavaScript
Tailwind Bootstrap
Markdown OpenCV
NumPy LaTex Fusion360
MATLAB MS-Excel Gazebo
RViz Simulink ROS

RELEVANT COURSES

MOOC

- Data Structures and Algorithms
- Python Programming
- Aerial Robotics -[Certificate]

Department Courses

- Differential Calculus (MAL101, MAL102)
- Integral Transform and Partial Differential Equations(MEL201)
- Business Analytics(CSL374)

EXTRACURRICULARS

- Conducted and volunteered for workshops under the IEEE VNIT Student Branch.
- Member of Team Velocity, a team of enthusiasts from VNIT Nagpur working to design and fabricate a Formula Student racecar.
- Sports- Cricket Player