AKASH CHAUTE

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PROJECTS

Voice Assistant

⌂ **GitHub**

📅 December-2022

- This voice assistant is made in the python programming language. It takes input in the form of voice and outputs in voice and text format.
- It has various features which include 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

Tic-Tac-Toe(CPP)   ⌂ **GitHub**
Developed a Tic-Tac-Toe game. A simple game of 2 players played on a 3X3 board.

Path Planning   ⌂ **GitHub**
Worked on a global path planner algorithm to find the shortest path between two points using A-star Algorithm.
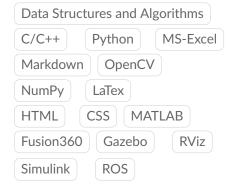
EDUCATION

Visvesvaraya National Institute of Technology
B.Tech in Mechanical Engineering
CGPA: 8.32/10

📅 December 2020 – May 2024(expected)

📍 Nagpur, India

TECHNICAL SKILLS

Data Structures and Algorithms
C/C++   Python   MS-Excel
Markdown   OpenCV
NumPy   LaTex
HTML   CSS   MATLAB
Fusion360   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)

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.