Self-Driving Vehicle Project: Week 8

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Zhuohuan Li (GR)

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Who we are

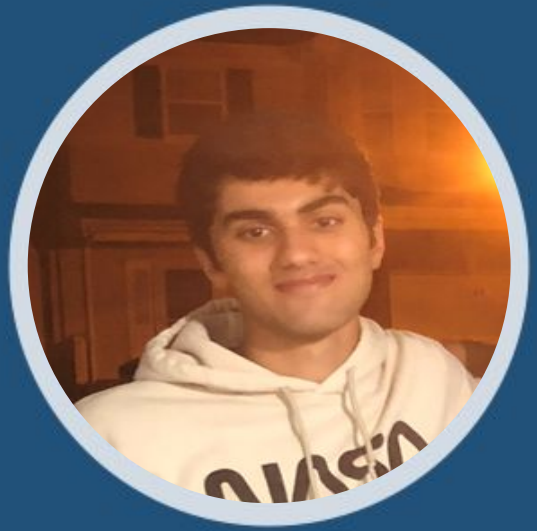
Adas Bankauskas (UG)

Abia Mallick (UG)

Malav Majmudar (UG)

Who we are

Lohith Bodipati (HS)



Aayush Agnihotri (HS)

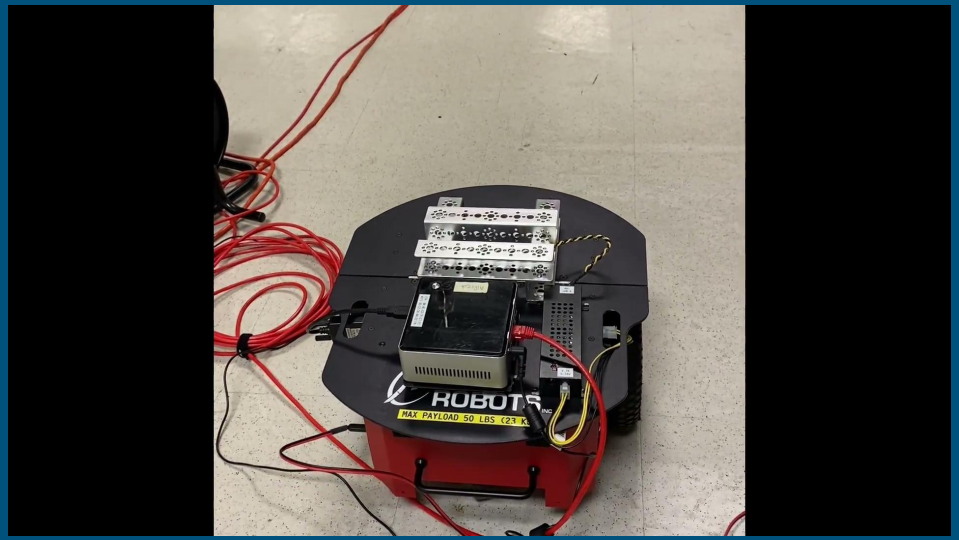
Who we are

Project Objectives

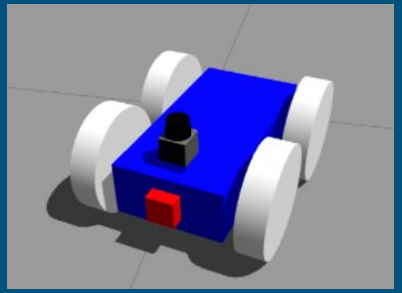
- Build a fully functional self-driving vehicle
- Incorporation of ROS control into existing car software
- Use of AI/machine learning algorithms for self-driving behavior
- Use Gazebo to map out simulations
- Building the physical model at WINLAB and testing its autonomy in a real environment

Current Progress

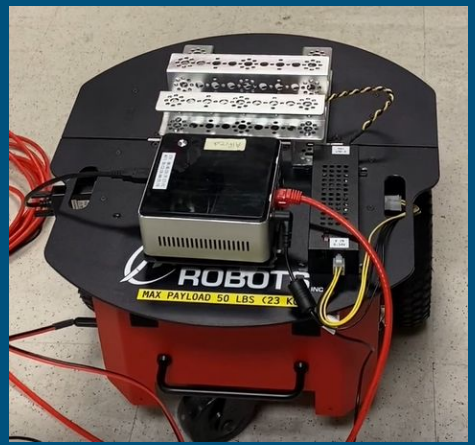
- Connected to Pioneer 3-DX and ran appropriate scripts to steer robot through model intersection
- Configured wireless connection and drove Pioneer wirelessly alongside smaller mobile robots
- Working on creating a direct connection between Pioneer node and Realsense to view continuous RealSense camera feed while driving



Future Plans



- Implement self-driving algorithms on smaller mobile robots
  - Use RealSense camera feed and corresponding steering inputs as training data
- Explore ROS scripts for steering and properly configure ROSARIA onto smaller robots
- Combine RealSense camera feeds and extract position of any object in camera view based on relative position to all cameras



Any Questions?