



Autonomous Vehicle Project

Women's Robotics Club

Goals

- Emulate a ride sharing app like Uber or Lyft
- Optimize the time in which customers are sent cars to take them to their destinations
- Break up the project into different phases

Ongoing: Phase I

- Get the vehicles to move
- Have 2 vehicles communicate with each other as per customer requests
 - Who is going to pick up whom?
- We currently have two almost-ready vehicles
 - Design team should add the finishing touches

Later Phases

- Add bikes, buses, and other transportation methods to create a smart city

Teams

Each team should have about 3-4 people

1. Design
 - a. Continue to build the cars and test them along with the algorithms and code
2. Algorithms
 - a. Write the code and test the cars and adjust as necessary
3. Outreach
 - a. Work closely with our mentor in community outreach events and partnerships with museums, high schools, etc.

Algorithms Workshops

- Two part workshop where Prof. Allahviranloo will teach the optimization algorithms on **Tuesday October 31st & Tuesday November 7th** during club hours (ST105)

Timeline

- **Oct 24:** Kick Off Meeting
- **Oct 31:** Algorithms Workshop Part I
- **Nov 7:** Algorithms Workshop Part II
- **Nov 9:** Design team has vehicles ready to go to start testing
- By the end of November (ideally before Thanksgiving Break), the goal is to have the code and the vehicles working

Benefits

- Get hands on experience with a project that could enrich your resume
- Be part of something cool