

Weekly Report 1

Team: sdmay22-42

Project Title: A Robotic Sensing System for Gas Emission Measurement

Date: 10/03/21

Members:

Jason Grunklee - Robotics and Sensor Electronics Team Specialist

Animesh Shrouti - Sensor Electronics Project Lead

Freedom Clark - Robotics Project Lead

Chimzim Ogbondah - Data Collection and User Interface Project Lead

Tzu-Chien Liu - Robotics and Data Collection Team Specialist

Robert Wedan - Project Manager

What we've accomplished in the past week/what we've been researching:

Jason Grunklee - In the past week I worked on the in class presentation and the engineering standards assignment. I also researched more potential robots to use.

Animesh Shrouti - In the past week I worked on researching various NDIR CO2 sensors. In addition to this I began to work on making a comparison chart for the various sensors we are thinking about purchasing.

Freedom Clark - During last week I researched different types of robots and organized them in a spreadsheet according to some specifications that I thought were the highest priority. I sorted them by cost, size, weight, load which are some of the most important aspects to look at before deciding on the type to purchase.

Chimzim Ogbondah - Worked on the in class presentation and added IEEE standards to the engineering standards, requirements, and constraints assignment.

Tzu-Chien Liu - Participate in class presentation, provide suggestions on presentation content, and offer source of the sensor for the project.

Robert Wedan - Worked on team in-class presentation as well as finishing the engineering standards, requirements, and constraints assignment.

What we're planning to do in the coming week:

Jason Grunklee - Complete the upcoming assignments and get ahead of schedule on those, so that we can focus on the project itself and hopefully get a better plan for the future.

Animesh Shrouti - Continuing to be more detailed about research for the sensor chart. Additionally, begin to look into the other parts of the robot.

Freedom Clark - Research about different attachments for the robot including an robotic arm for gripping a drill or possibly a pre-build drilling tool.

Chimzim Ogbondah - I will continue working on understanding the project and understanding clear requirements needs for the data collection and UI.

Tzu-Chien Liu - Will monitor closely to see what the team need and help as soon as the request appear; Focus on understanding the the project as a whole more.

Robert Wedan - Will work on the team project plan as well as checking in with each project lead on progress and project growth.

Issues we had in the previous week:

Jason Grunklee - Fully understanding everything we will need to accomplish in order to get a working robot. Also the sensing apparatus we plan on making still has a lot of unknowns around it.

Animesh Shrouti - Understanding how the sensor will actually be integrated into the robot and the action it will be taking to collect data.

Freedom Clark - Seems to be difficulty in communication with the team and professor. Many messages are sent last minute by both parties resulting in unnecessary stress and resentment.

Chimzim Ogbondah - Understanding what modules will be available to ensure data collection with a user interface

Tzu-Chien Liu - Still need to understand how to work with the team more efficiently.

Robert Wedan - Trying to understand the expectations of the in-class presentation compared to the lightning talk was an issue that I had in the past week.