

Weekly Report 4

Team: sdmay22-42

Project Title: A Robotic Sensing System for Gas Emission Measurement

Date: 10/24/21

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 - Last week I was researching more drilling options and decided on a design. I then made some drawings for it to show the group and our client.

Animesh Shrouti - Last week I narrowed down the potential sensor options to two which I felt most strongly fit our criteria.

Freedom Clark - Selected two potential robot choices. However, final selection will depend on what the drilling tool will need.

Chimzim Ogbondah - I did research into potential robotic arms after the meeting we discussed a rough plan for testing Jason's design

Tzu-Chien Liu - Looking into IMU measurement. Understand, analyze, and plan on how to implement the study to our team project; Assist Robert on constructing the lighting talk and do the presentation

Robert Wedan - I aided in completing the testing document and associated lighting talk.

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

Jason Grunklee - In the upcoming week we are trying to get what we need in order to build the drilling tool. I am trying to get the design in CAD.

Animesh Shrouti - This week I will begin to look into sensor integration and pin maps to get a head start on potential wiring.

Freedom Clark - We are planning to build a drilling tool, so I am going to look into possible motors to use for it.

Chimzim Ogbondah - I plan to research the necessary components for the drill that require software

Tzu-Chien Liu - Talk with Chimzim to assist him with his work, if he is not available, I will be working with Freedom.

Robert Wedan -.I plan to focus more on our team schedule and project work since there will be no documentation besides the weekly report this week.

Issues we had in the previous week:

Jason Grunklee - The testing document wanted our testing results but we are still in the design and planning phase so our final results are a long ways away.

Animesh Shrouti - In the previous week didn't get the opportunity to present sensor research due to meeting time constraint.

Freedom Clark - Progress seemed to be moving along slowly, but looks to be getting better.

Chimzim Ogbondah - N/A

Tzu-Chien Liu - Still need to talk to one of the group member to make sure I can best put in effort in this team

Robert Wedan - Without a solid opinion on our final design, it is hard to think about how to document our testing procedures.