Team 10

Project Title: Embedded Machine Learning

Date: 10/25/2021

Members:

James Gossling

Jackson Lopata

Hailey Lucas

Eric Reusch

Francis Mago

Isaac Stich

Christian Williams

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

James Gossling: Narrowed down hardware/found solutions for power and voltage regulation

Jackson Lopata: Still working on design for locking mechanism, working to getting gear movement in Solid works

Hailey Lucas: Testing Lightning Talk, looked into more of the provided links on embedded machine learning

Eric Reusch: Further research on interfacing with arduino and similar microcontrollers, familiarizing myself with working with microcontrollers

Francis Mago: Found a paper about training keyword spotters with limited and synthesized speech data. Will read more into specifics that could help us in the training phase.

Isaac Stich: Did some research on the arduino nano to see what other capabilities it has outside of what was shown in the coursera course.

Christian Williams:Did research into alternate microcontrollers like Nvidia Jetson in case we want to switch controllers to test. Also looked into 3D printing if we need it.

What we're planning to do in the coming week

James Gossling: Finalizing hardware list, research how to train models well.

Jackson Lopata: Keep working on the design of the locking mechanism.

Hailey Lucas: Research on the embedded system aspect of our design.

Eric Reusch: Continue research with implementation on microcontrollers

Francis Mago: Continue reading into how to train keyword spotters.

Isaac Stich: Continue research on microcontrollers.

Christian Williams: Continue researching boards and 3D printing possibilities.

Issues we had in the previous week

James Gossling: None

Jackson Lopata: none

Hailey Lucas: None

Eric Reusch: None

Francis Mago: None

Isaac Stich: None

Christian Williams:None