Weekly Team Task Report 10, Wk 10

Team: Astraea				**Date:** 3.27.20
Project Title: Telescope Mirror Communication and Control System				
Michael	**Peter**	**Adam**	**Trey**	**Brandon**
Present	Present	Present	Present	Present
On-time	On-time	On-time	On-time	On-time

Recent Meetings:
Client Zoom Meeting 3.27.20

TASKS COMPLETED since last meeing:

Task Title: Create a script to make these task reports easier to make	**Task Initiation:** 3.25.20	**Orig. Due Date:** 3.26.20	**Status:** 100%
Who (%): Peter (95%) Adam (5%)			
Description: Write a python script that auto generates a pdf of the task report so we don't have to mess around with google docs' terrible copy and paste.			
Outcome: Code written and tested and working.			

Task Title: Investigate Deepstate for Testing APIs	**Task Initiation:** 2.27.20	**Orig. Due Date:** 3.16.20	**Status:** 100%
Who (%): Peter (100%)			
Description: Investigate to potentially use deepstate fuzzing to test the various APIs for bugs			
Outcome: At this time, deepstate is not easily available to the public, i.e. incredibly lacking in documentation, have to use docker(when there is a working image), etc.			

This week's Tasks: Work plan for coming week:

Task Title: Order Pi Parts & Laptop	**Task Initiation:** 3.27.20	**Orig. Due Date:** 3.30.20	**Status:** 0%
Who (%): Adam (100%)			
Description: Contact Henrique to order new Pi, laptop, sd card, and Pi case			
Outcome: Parts are ordered			

Task Title: Order NAT parts	**Task Initiation:** 3.27.20	**Orig. Due Date:** 3.30.20	**Status:** 0%
Who (%): Adam (100%)			
Description: Contact manufacturer of NATCon boxes and get new pair of DC-DC converters (ask for quote first and confirm with JC			
Outcome: Parts are ordered			

Task Title: Put together demo doc	**Task Initiation:** 3.27.20	**Orig. Due Date:** 4.3.20	**Status:** 0%
Who (%): All			
Description: Put together demo summary for Gerard and JC documenting results and how to move forward			
Outcome: Document is sent to JC and Gerard			

Task Title: User Manual	**Task Initiation:** 3.23.20	**Orig. Due Date:** 4.24.20	**Status:** 0%
Who (%): Peter (50%), Rest TBD			
Description: Create the user manual for the system to give to JC so they can replicate/use the system			
Outcome: A manual for the system			

Task Title: BrainCon Code Documentation	**Task Initiation:** 3.23.20	**Orig. Due Date:** 4.24.20	**Status:** 2%
Who (%): Trey (70%) Peter (20%) Adam (10%)			
Description: Document the code to limit future questions about source code and to allow future developers to read and understand our code.			
Outcome: Well-documented code.			

Task Title: NeuronCon Code Documentation	**Task Initiation:** 3.23.20	**Orig. Due Date:** 4.24.20	**Status:** 2%
Who (%): Adam (34%) Mike (33%) Brandon (33%)			
Description: Document the code to limit future questions about source code and to allow future developers to read and understand our code.			
Outcome: Well-documented code.			

Task Title: Circuit Diagrams	**Task Initiation:** 3.27.20	**Orig. Due Date:** 4.24.20	**Status:** 1%
Who (%): Adam (70%) Peter (30%)			
Description: Create circuit diagrams for all of the curcuits made for the project to allow future EE's to improve and understand the electronics.			
Outcome: Circuit diagrams			

Task Title: Design Review 3	**Task Initiation:** 3.27.20	**Orig. Due Date:** 4.3.20	**Status:** 10%
Who (%): All			
Description: Create some sort of presentation for Design Review 3, modified due to the covid-19 craziness			
Outcome: A presentation for design review 3			

Task Title: Convert code away from WiringPi	**Task Initiation:** 3.13.20	**Orig. Due Date:** 4.10.20	**Status:** 11%
Who (%): Michael (100%)			
Description: WiringPi seems to conflict with the PWM PiGPIO lib. PiGPIO also supports GPIO access and does not use the WiringPi virtual numbering (which has only confused things).			
Outcome: Code converted to setup with and use PiGPIO commands. Pushed to repo.			

Task Title: Test pins after conversion to PiGPIO	**Task Initiation:** 3.13.20	**Orig. Due Date:** 4.10.20	**Status:** 0%
Who (%): TBD (dibs)			
Description: Test that conversion to PiGPIO addresses the correct pins and outputs the correct signal.			
Outcome: Code tested and confirmed to work.			

Task Title: Utilize Thread Pool	**Task Initiation:** 3.6.20	**Orig. Due Date:** 3.29.20	**Status:** 70%
Who (%): Brandon (100%)			
Description: The thread pool code compiles, must create a workflow and main method for using thread pool on NeuronCon			
Outcome: A main.cpp file designed using the thread pool.			

Task Title: Make changes to UGRADS abstract	**Task Initiation:** 3.23.20	**Orig. Due Date:** 4.3.20	**Status:** 0%
Who (%): Adam (20%), Trey (20%), Peter (20%), Mike(20%), Peter (20%)			
Description: Develop a phenomenal abstract for UGRADS			
Outcome: Abstract is submitted			

Upcoming Tasks:

Task Title: Research and implement sending command line instructions from within C code	**Task Initiation:** 3.13.20	**Orig. Due Date:** 4.10.20	**Status:** 0%
Who (%): Mike (100%)			
Description: It is useful (yet dangerous) to accept command line input from code. Research protocol in C and implement test code.			
Outcome: Test code written and tested.			

Task Title: Determine packet structure for including command line instructions.	**Task Initiation:** 3.13.20	**Orig. Due Date:** 4.10.20	**Status:** 0%
Who (%): Trey (50%) Mike (50%)			
Description: Decide on a way to include, differentiate, and act on command line instructions within packet.			
Outcome: Design determined.			

Task Title: Implement the architected design for command line instructions	**Task Initiation:** 3.13.20	**Orig. Due Date:** 4.10.20	**Status:** 0%
Who (%): Trey (50%) Mike (50%)			
Description: Trey will incorporate and differentiate the data. Mike will differentiate and execute the data.			
Outcome: Data terminated.			

Task Title: Create and document useful aliases for BrainCon	**Task Initiation:** 3.13.20	**Orig. Due Date:** 4.10.20	**Status:** 0%
Who (%): Mike (100%)			
Description: Create useful system admin aliases for BrainCon to facilitate easy system maintenance.			
Outcome: Aliases created and documented.			