**KompyuterM3chakrs**

Week of (Date): July 26, 2019

Team Members Active this Week:

Nathan Bellew

Melanie Grumley

Keren Angeles

Weekly Update of Project/Research (Summarized by Team Lead):

This is the final week for our research/project for the summer, so we want to wrap up any last possible projects on the mower, finish our deep learning research paper, and finalize beginner training for security. Each team member was given a specific task that regarded one or more of out tasks for the end of the summer.

Name: Nathan Bellew Hours worked this week:

Please explain in detail what you worked on this week.

I continued work on the research paper and the deep learning project, I also assigned some extra work for each team member to help them finish the week with as much learned as possible as we move to the end of July.

What are the outcomes of your research and time for the week?

We are a lot closer to finalizing the deep learning research paper.

Please describe any roadblocks or difficulties you experienced in your research this week.

The Deep Learning roadblock is time, the project takes a long time to run and it needs to be run in full and then submitted for work to be saved. We lost a day to an unexpected reset which lost a lot of work.

What are your next steps moving forward?

We will continue to finalize the project and continue it throughout the school year, unpaid, if need be. We will start conversations with the community in the coming weeks and new projects will be assigned at the end of July.

Name: Melanie Grumley Hours worked this week: 20.5

Please explain in detail what you worked on this week.

I read about using machine learning to detect malicious URLs.

What are the outcomes of your research and time for the week?

To write the introduction to our research paper.

Please describe any roadblocks or difficulties you experienced in your research this week.

None really

What are your next steps moving forward?

Continue reading and writing the research paper.

Name: Keren Angeles Hours worked this week: 23

Please explain in detail what you worked on this week.

This week I learned about Machine Learning as a side project for Dr. Basnet

What are the outcomes of your research and time for the week?

During this self study I learned about Machine Learning, Tensorflow and how to train machine in recognizing malicious URLs. In order to understand this process I watched tutorials and performed some experiments as well.

Please describe any roadblocks or difficulties you experienced in your research this week.

There were some bugs in the practice that I still haven’t figured out how to fix. The results showed that the training went well however the code for the predictions needs to be tweaked

What are your next steps moving forward?

Moving forward, now I have to attempt to replicate an experiment using either Tensorflow, Keras, or Theano.