

CAE Research Project Meeting Minutes

11-04-2022

- **Participants**
 - Dr. Waleed Farag (PI)
 - Dr. Xin-Wen Wu
 - Drew Rado
 - Emily Himes
 - Hector Linarez
 - Meghan Schilpp
 - Maria Balega
 - Sky Semone
 - Zach Keyser
- Meeting started at 6:00 pm
- Unanimously approved minutes for meeting on October 28th, 2022

Main Points:

- **Progress report**
 - Zaryn finished paper, but needs to update Dr. Wu on this progress.
 - Drew found that using Wireshark is great for capturing data, and then using Zeek to process the data to be exactly like the IoT-23 data.
 - Needs to filter out the IoT boards from his personal network data, since it's running on his network.
 - Current dataset about 150 lines of captured network data.
 - Sky worked on Arduinos: Fixed problems with the boards bricking up, but there are still issues with data calibration returning.
 - Made python scripts for formatting/importing data.
 - Hector was working on Arduinos with Sky and started looking into data visualization and reviews the Part One ML algorithms.
 - Zach was helping Sky with Arduinos
 - Meghan looked to ML scripts used in the previous part.
 - Emily did an overhaul of the OneDrive and organized lots of the important documents that people on the team should read.

Discussion points

- Now that Drew is collecting data, focus on running the collected data through the Part-One algorithms.
 - Arduinos are now more stable and able to be reset remotely, so we no longer have to manually reset them in Room 305
 - Dr. Wu mentioned that we should document our preprocessing steps for future use
 - Make sure its on the OneDrive
 - Emily was working on documentation so, review documents there
- **Tasks:**
 - Drew/Nathan
 - Work on Zeek
 - Find ways to inject anomalies
 - Sky
 - Look into python data visualization tools
 - Think about ways to inject anomalies

- Meghan
 - Continue learning about SVM/DCNN and other ML processes
 - Use these for the new Zeek dataset.
- Emily
 - Continue working on the OneDrive
 - Learn ML procedures from part 1
- Maria/Zaryn
 - Start working with the new data (small dataset for now)
 - Update Meghan
- Drew/Hector
 - Look into how to create anomalies in Arduino network data

Adjournment at 6:35

Next meeting will be held on Friday, November 11th at 6:00 pm