## CAE Research Project Meeting Minutes 9/16/2021

- Participants
  - Dr. Waleed Farag (PI)
  - o Dr. Soundararajan Ezekiel (Co-PI)
  - o Maria Balega
  - Zaryn Good
  - Franklin May
  - Ryan Gress
  - o Cassie Lefever
  - o Alicia Deak
  - Eliot Hocke
  - o Sky Semone
- Meeting started at 3:10 p.m.
- Unanimously approved minutes for meeting on September 9, 2021
- Main Points
  - Discussed:
    - Maria & Cassie
      - Tried to combine files using MATLAB, still getting memory error
      - Could only combine 6 csv files in python, not reading all classifications from the captures when running XGBoost
    - Alicia
      - Working on synthetic data
    - Zaryn
      - Running the Mirai35 through Alex Net, averaging 80% accuracy, focusing on running each capture at time is giving better results
    - Franklin
      - Ran 20% of KDD dataset in XGBoost and SVM using binary classification, achieved 95% accuracy in XGBoost, achieved 93% accuracy in SVM
    - Ryan
      - Ran a capture from TON-IoT dataset in XGBoost using binary classification, achieved 78% accuracy
      - Working with Zaryn to run DCNN
  - o Tasks:
    - Maria & Cassie
      - Work on fixing the memory error, try to take classification label separate and concatenate after that when preprocessing
    - Alicia & Eliot
      - Convert IoT23 csv files to dat or txt file to see if it uses less memory
      - Continue working on synthetic data
    - Zaryn
      - Continue running IoT datasets in DCNN

- Franklin
  - Run full KDD dataset in XGBoost and SVM
- Ryan
  - Run other captures from TON-IoT dataset in XGBoost
  - Reformat the TON-IoT data to run through DCNN
- o General tasks:
  - Work on abstracts and continue revising them
    - Franklin is working on DCNN abstract
    - Maria is working on XGBoost abstract
- Adjournment at 4:00 p.m.
- Next meeting will be held on Wednesday September 22 at 3:15 p.m. via Dr. Farag's Zoom room