CAE Research Project Meeting Minutes

9/30/2021

- Participants
  - Dr. Waleed Farag (PI)
  - Dr. Soundararajan Ezekiel (Co-PI)
  - Dr. Xinwen Wu
  - Maria Balega
  - Zaryn Good
  - Franklin May
  - Cassie Lefever
  - Alicia Deak
  - Eliot Hocke
  - Ryan Gress
  - Dr. Larry Pearlstein
- Meeting started at 3:00 p.m.
- Unanimously approved minutes for meeting on September 23, 2021
- Main Points
  - Discussed:
    - Maria & Cassie
      - Got one fourth of a merged IoT23 csv file to run in XGBoost, achieved up to 99% accuracy but two classifications were missing so this may have affected results
      - Working with Dr. Pearlstein to connect to TCNJ’s machine
    - Alicia & Eliot
      - Found that dat files were same size as csv, running synthetic data through various algorithms and its performing better than original data
    - Zaryn
      - Got the DCNN code from Jackson
  - Tasks:
    - Maria & Cassie
      - Continue running more of the split IoT23 data in XGBoost, try to get all nine classifications, try running in local machine or Linux machine
    - Alicia & Eliot
      - Run dat files through XGBoost
      - Continue working with synthetic data to compare it against original data
    - Zaryn
      - Run the new code in DCNN, continue to look into why the accuracy for anomalies is low
    - Franklin
      - Work with OneVSRest and OneVSOne classifier in SVM
Ryan
- Run other captures from TON-IoT dataset in XGBoost
- Reformat ToN-IoT data to run through DCNN

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 Thursday October 7 at 4:00 p.m. via Dr. Farag's Zoom room