

CAE Research Project Meeting Minutes

9/30/2021

- Participants
 - o Dr. Waleed Farag (PI)
 - o Dr. Soundararajan Ezekiel (Co-PI)
 - o Dr. Xinwen Wu
 - o Maria Balega
 - o Zaryn Good
 - o Franklin May
 - o Cassie Lefever
 - o Alicia Deak
 - o Eliot Hocke
 - o Ryan Gress
 - o Dr. Larry Pearlstein
- Meeting started at 3:00 p.m.
- Unanimously approved minutes for meeting on September 23, 2021
- Main Points
 - o 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
 - Franklin
 - Achieved up to 98% accuracy in SVM when running full KDD dataset
 - o 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 OneVSOOne classifier in SVM

- Ryan
 - Run other captures from TON-IoT dataset in XGBoost
 - Reformat 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 Thursday October 7 at 4:00 p.m. via Dr. Farag's Zoom room