

# CAE Research Project Meeting Minutes

9/23/2021

- 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
- Meeting started at 4:00 p.m.
- Unanimously approved minutes for meeting on September 16, 2021
- Main Points
  - Discussed:
    - Maria & Cassie
      - Got 19 captures from IoT23 data preprocessed using MATLAB, split into 6 csv files and running them in XGBoost
    - Alicia & Eliot
      - Converted all IoT23 csv files to dat extension, synthetic data is ready
    - Zaryn
      - Waiting for DCNN files and code from Jackson to run data
      - DCNN is having trouble finding malicious, only getting 50% accuracy
    - Franklin
      - Ran full KDD in XGBoost with nonbinary classification, achieved up to 98% accuracy, having trouble with SVM because of dataset size
  - Tasks:
    - Maria & Cassie
      - Run preprocessed IoT23 data in XGBoost, work on accessing Dr. Pearlstein's machine
    - Alicia & Eliot
      - Run through .dat files to see how much memory it uses, generate synthetic data subset and run it in XGBoost, SVM, etc.
    - Zaryn
      - Continue running DCNN with Jackson, look into the why the accuracy for anomalies is low
    - Franklin
      - Try running KDD full dataset in SVM
    - Ryan
      - Run other captures from TON-IoT dataset in XGBoost
      - Reformat the 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 4:50 p.m.
- Next meeting will be held on Thursday September 30 at 3:00 p.m. via Dr. Farag's Zoom room