CAE Research Project Meeting Minutes
06-28-2023

- Participants
  - Dr. Soundarajan Ezekiel
  - Dr. Xinwen Wu
  - Jared Giesen
  - Kurtis Johnson
  - Samuel Rocco
  - Nathan Metzger
- Meeting started at 11:30 am
- Unanimously approved minutes for meeting on June 18th, 2023

Main Points:
- Progress report
  - Drew –
    - Working on IoT test bed paper
  - Kurtis –
    - Helped Maria with IEEE Access paper
      - Ran XGBoost and SVM on KDD, TON, and IoT23 data sets on Titan for efficiency comparison
      - Ran XGBoost on five datasets testing different parameters on 4080 machine
        - Tested train/test splits, max_depth, and eta (learning rate)
      - Ran SVM on five datasets testing different parameters on 4080 machine
        - Tested train/test splits, C, gamma, and different kernels
  - Sam –
    - Ran TON, KDD, and data captures through tSNE for visualization
  - Jared –
    - Working on getting remote connection into 305 machines
  - Nathan –
    - Visualized data sets with k means clustering and PCA

- Discussion points
  - Finish up respective tasks testing parameters of algorithms and visualizations on all data sets
  - Everyone needs to focus on DCNN to quickly preprocess and train all networks on all data sets

- Tasks:
  - Everyone: Learn DCNN by reviewing Zaryn’s tutorial
  - Drew: Finalize the IoT paper
  - Kurtis:
    - Finish running SVM on datasets
    - Run XGBoost and SVM on IoT23 dataset
  - Sam:
    - Run tSNE on the three data sets in Maria’s paper
  - Jared:
    - Set up remote connection to 305 machines
  - Nathan:
    - Reconfigure PCA data visualization
Adjournment at 12:00 pm
Next meeting will be held on Wednesday, July 5th at 11:00am