CAE Research Project Meeting Minutes

Wednesday January 12, 2022

- Participants
  - Dr. Waleed Farag (PI)
  - Dr. Soundararajan Ezekiel (Co-PI)
  - Dr. Xin-Wen Wu
  - Zaryn Good
  - Ryan Gess
  - Alicia Deak
- Meeting started at 1:00pm.
- Unanimously approved minutes for meeting on January 6, 2022
- Main Points
  - Discussed:
    - ALL
      - Access to NJ computer
      - All data collection should be completed by the next meeting
      - Two papers discussed:
        - Comparison study of IoT anomaly detection for XGBoost versus traditional methods of SVM
        - DCNN as a viable method for anomaly detection of IoT devices
      - Nate is working on fixing the Titan
        - Full uninstall/reinstall of Operating System might be necessary
      - Wrapping up the data collection and analysis part of the project (one week, extended due to technology issues)
      - Complete write-up using traditional IEEE methods 6-7 pages (will revisit timeline at the next meeting)
    - Maria & Alicia
      - Run through different SVM kernels, documenting metrics including cpu time, using .025, .05, .075 percent of the data
        - Had to rerun all of the captures again to get the big dataset
        - Once uploaded, will run SVM on TCNJ computer
    - Zaryn & Franklin
      - Meet to discuss process for the DCNN
      - Complete the abstract, update on the one-drive
    - Ryan
      - Compare the datasets through various SVM kernels and in a file.
      - Ryan cannot connect to TCNJ
  - Tasks:
    - ALL
      - Compare balanced accuracy against traditional accuracy for samples of the weighted and unweighted data

        - Wrapping up the data collection and analysis part of the project (one week, extended due to technology issues)
        - Complete write-up using traditional IEEE methods 6-7 pages (will revisit timeline at the next meeting)
        -
    - Maria
        - Run IoT23 through SVM
    - Alicia
        - Post codes in pdf on the one-drive, organize one-drive
        - Create a smaller distribution for the DCNN of TON and IoT23
    - Zaryn
        - Run the smaller subset of the IoT23 dataset.
        - Run the smaller subset of TON
        - Ask Dr. Larry to get MATLAB onto the tcnj computer
    - Ryan
        - Access the tcnj computer, see if it is local desktop or something else.
    - Franklin and Ryan
        - Compare the datasets through various SVM kernels and in a file.
        - Find Benchmark to compare current results
- Adjournment at 2:05pm.
- Spring 2022 meeting will be held on Wednesdays 1130-1230, next meeting Wednesday Thursday January 13, 2022, 11:00am.