

# CAE Research Project Meeting Minutes

2/2/2022

- Participants
  - o Dr. Waleed Farag (PI)
  - o Dr. Soundararajan Ezekiel (Co-PI)
  - o Dr. Xin-Wen Wu
  - o Zaryn Good
  - o Ryan Gress
  - o Alicia Deak
  - o Maria Balega
  - o Franklin May
- Meeting started at 11:30 am.
- Unanimously approved minutes for meeting on January 26, 2022
- Main Points
  - o Discussed:
    - ALL
      - Use the same machine for each dataset so that execution time is comparable
      - Share results before meetings so feedback can be provided
      - Division of three different IEEE papers
        - o Alicia and Maria: XGBoost and IoT23 with comparison to SVM/DCNN
        - o Ryan: TON-IoT with comparison to different algorithms
        - o Franklin: KDD dataset with comparison to different algorithms
      - Share incremental progress of papers
    - Maria
      - Ran IoT23 20% sample through SVM, achieved accuracy up to 96%
    - Alicia
      - Ran IoT23 using XGBoost, balanced accuracy 75%, accuracy 99%
    - Zaryn
      - Met with everyone leading a paper to discuss the machine they are running on, working on DCNN for each dataset
    - Franklin
      - Working on paper, SVM and XGBoost results are finalized
    - Ryan
      - Using a subset of ToN-IoT dataset, accuracies are similar to a published paper
  - o Tasks:
    - Maria
      - Take 5% sample from each classification and run SVM
    - Alicia
      - Run IoT23 XGBoost using 4 classifications to be consistent with SVM, visualize results

- Zaryn
  - Continue running DCNN for KDD, IoT23, and ToN-IoT
- Franklin
  - Continue working on paper
- Ryan
  - Look into why XGBoost isn't working as good for ToN-IoT23 dataset
- Adjournment at 12:30 pm.
- Next meeting will be held on Wednesday February 9 at 11:30 am.