

Meeting date: 24th September 2024

Progress: Finished outline

Any problems:

Steps forward:

- Literature review
- Data collection
- Train the SHAP
- Grant HPC access

Meeting date: 10th October 2024

Progress:

- Finished review
- Successfully connected to NYU Greene

Any problems:

- Data collecting is taking longer than expected

Steps forward:

- Finish data collection
- Run basic classification (SVM or choose what is best)
- Set new meeting date

Meeting date: 16th October 2024

Progress:

- Preprocessed two datasets

Any problems:

- No problems

Steps forward:

- Model training
- Simulate adversarial attacks on these models

Meeting date: 19th October 2024

Progress:

- Trained the models on the preprocessed datasets
- Started simulating adversarial attacks on the models

Any problems:

- Connecting to the HPC

Steps forward:

- Finish simulating adversarial attacks on the models
- Compute SHAP values

Meeting date: 25nd October 2024

Progress:

- Simulated almost all of the attacks on the models
- Computed some SHAP values

Any problems:

- Connecting to the HPC
- Carlini Wagner simulation isn't running

Solutions:

- Contacted IT Support and waiting for reply
- Going to campus on the weekends to solve the issue

Steps forward:

- Finish simulating all the attacks
- Compute all needed SHAP values
- Analyze the values

Meeting date: 8th November 2024

Progress:

- Finished progress report
- Analysed SHAP values and influence on dataset

Any problems:

- Checking progress report, making sure of correctness

Solutions:

- Received feedback on report
- Brainstormed ideas for next steps

Steps forward:

- Look into data augmentation for last phase
- Act on feedback
- By early week of 18th, get SHAP exploitations done

Meeting date: 17th November 2024

Progress:

- Based on SHAP value analysis we have applied targeted attacks on the models
- Made plans on what to do next

Any problems:

- No problems

Steps forward:

- Look into data augmentation for last phase
- Start writing the final report

Meeting date: 27th November 2024

Progress:

- Start writing the report
- Look into down weighting data
- Start presentation prep

Any problems:

- Struggled with creating the dataset

Steps forward:

- Continue working on labels
- Continue writing final report
- Continue working on presentation

Meeting date: 4th December 2024

Progress:

- First Draft of the report ready
- Started presentation script
- Completed analysis on SMOTE results

Any problems:

- Running the perturbations has long run time
- Unsure about the results of the perturbations

Steps forward:

- edit/improve report
- Presentation slides