#### EE/CPRE/SE 492 BI-WEEKLY REPORT 04

March 24 – April 7

Group number: 16

Project title: Robustness of Microarchitecture Attacks/Malware Detection Tools against Adversarial Artificial Intelligence Attacks

Client &/Advisor: Berk Gulmezoglu

**Team Members:** 

Shi Yong Goh

Connor McLoud

Felipe Bautista Salamanca

Kevin Lin

Liam Anderson

Eduardo Robles

o <u>Bi-Weekly Summary:</u>

### **o Previous Week's Accomplishments:**

- Shi Yong Goh:
  - Reviewed all the data collected in the previous weeks to ensure that there were no errors or discrepancies.
  - Reran the experiment and collected new data.
- Connor Mcloud:
  - Added more documentation on the GUI
- Felipe Bautista:
  - Created a User Manual to Operate the UI
  - Ran test to pin point an ongoing bug with displaying logs. Was able to find the issue and solved it.
  - Refactor some old code that could be improved.
- Kevin Lin:
  - Finalized all attack code testing
  - Reviewed all data collected throughout the semester
- Eduardo Robles:
  - Improved the documentation of the attack code results.
  - Added more graphs to help visualize the attacks.
- Liam Anderson:

• Created documentation on how to run all files, areas of the code that is important to know, and how to modify the attack codes.

# o **Pending Issues:**

Shi Yong Goh: N/AConnor Mcloud: N/AFelipe Bautista: N/A

• Kevin Lin: N/A

Eduardo Robles: N/ALiam Anderson: N/A

### Individual Contributions:

Team Member Names	Individual Contributions	Hours (this week)	HOURS (cumulative
Shi Yong Goh	Used instruction profiling to observe the performance of difference instructions. Compared execution time.	5	63
Connor Mcloud	Work on error logging and tracking for the GUI.	5	53
Felipe Bautista	Solved a bug where the console would display weird character when displaying the logs. Created a user manual for the UI.	6	58
Kevin Lin	Trying out consecutive x86 instructions in order to stimulate using various ports.	6	62
Eduardo Robles	Created multiple C codes to profile different x86 instructions	6	54
Liam Anderson	Worked on developing a python program that will can insert C code and generate programs to profile x86 power consumption	8	86

## o Plans for the Upcoming Week:

- Shi Yong Goh: Plan to work on the final report, prepare the poster and the final presentation.
- Connor Mcloud:
  - Complete the final report, presentation, and poster
- Felipe Bautista:
  - Plan to work on the final report, prepare the poster, and the presentation
- Kevin Lin:
  - Work on finishing the poster to get feedback from the client.
- Eduardo Robles:
  - Work on the final report, poster, and presentation
- Liam Anderson:
  - Plan to improve the demo of the project and work on the final assignments.

### Summary of Weekly Advisor Meeting:

Our upcoming meeting will be our last opportunity to discuss our project with him. In order to ensure that we cover everything we need to, we will be working to wrap up all remaining tasks this week. During our final meeting, we plan to present our poster, presentation slides, and final report to our advisor and seek his suggestions.