CPRE 491 - Weekly Report #4

Date: 10/24/2021

Team: 08

Project Title: Extracting Black-box Deep Learning Models via Software-based Power Consumption Measurements

Members:

- Austen Van Brogen
- Michael Mazur
- Long Ly
- David Swarts
- Danielle Rodriguez
- Noah George

What we've accomplished in the past week/what we've been researching:

- Austen Van Brogen: Came up with regression testing setup
- Michael Mazur - Worked on the Testing lightning talk/document and explored remote access to GPU.
- Long Ly - Team meetings, client meetings, fleshed out system testing restraints
- David Swarts : Met with Professor Gulmezoglu to discuss testing our project. Watched some videos about how neural networks work.
- Danielle Rodriguez: Worked on testing document, researched python testing libraries for testing neural networks build with the tensorflow library
- Noah George: Researched more about the RAPL interface and what options are available to us on the GPU.

What we're planning to do in the coming week:

- Austen Van Brogen: Next week's assignment and lightning talk. Also learn more about neural networks
- Michael Mazur - Learn more about neural networks.
- Long Ly - Further tensorflow research and core learning algorithms analysis
- David Swarts : Learn more about Python.
- Danielle Rodriguez: Learn more about neural networks and constructing them with the tensorflow library
- Noah George: Continue looking for power measurement data for the GPU

Issues we had in the previous week:

- Austen Van Brogen: It was difficult to meet up this week due to schedule conflicts
- Michael Mazur - confusion with creating the testing document as the group had a lot of questions on it.
- Long Ly - Confusion with available interfaces on hardware. Confusions on the specificity of some tests section within the template document.
- David Swarts : Understanding how to define a neural network.
- Danielle Rodriguez: Understanding how each type of testing will be applied in our project
- Noah George: Have not found a RAPL equivalent for the GPU power measurements.