28 September 2022

Mitchell Williams u18013555

EPR402 Project Progress Meeting #10

Project Lab 1

* The original project concept note was a PC implementation – embedded version was added per additional requirements and performance specs are still based on PC implementation – make this clear in the report and discuss successes of both implementations
* In the design section of the report provide an explanation of performance specs on the PC VS implementation specs on embedded platform
* Discuss the first principles backpropagation code in report – it was worked on and thus should be included
* Shift focus to report now in October – use the experimental plan worked on previously in the semester to inform working on either accuracy improvements for the neural networks or more integrated solution problems
* Focus on achieving performance specifications over pure NN accuracy improvements – might not be extremely important/relative to final performance of system
* Work on getting the neural network to be invariant to noise if the final implementation will be presented with noisy data – need more data and focus on what the NN will see in the final implementation when it comes to training data
* Don’t delay work on integration/performance specifications for work on improving hyperparameters of NN through a graph search – work on them simultaneously if possible
* Focus on larger goal of Project and top-down approach of system as opposed to doing low-level operations like convolution from first principles
* Start report now as it will take a large amount of time
* Spend time on integration and getting real world interactions working with surfaces and objects – this is the last thing that has not really been implemented and integrated that is relative to specifications so should have largest focus now