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Final Project Proposal

The resurgence of neural networks in the last decade and its applications in deep learning has paved the way for a new kind of technology revolution where computers are quickly learning how to manipulate the environment to meet their goals. Neural networks has been labelled as embarrassingly parallel, therefore I would like to leverage the GEForce GTX 980 to enable computers to learn much faster. Although there are many applications, I'm a little torn between the two applications.

- Recognize numbers, this has been done multiple times before and its lost its novelty now, however due to my lack of experience with neural nets I can take this as a safe bet and do a survey on graphing how the number of threads corresponds to learning time.
- 2) Minesweeper, a second possibility is enabling the computer to learn how to play minesweeper. This is considerably more challenging, but it does also seem more exciting. To conclude I don't want to bite more than I chew, which I do constantly therefore your feedback will be well appreciated. Finally, there is a python framework called PyCuda, would it be ok if I used that? There are neat neural network libraries that python has, I don't know how easy it is to port them to CUDA architecture.