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Alternative to Gabler’s Lecture Summary: Implementing Tensorflow2 for GPU Integration

Tensorflow is an open-sourced deep learning library used widely for machine learning and especially for the implementation of neural networks. A graphic processing unit (GPU) functions much like a computer’s CPU – it receives input data and directs it to proper processing unit. GPUs, however, perform direct input data to much more specific but numerous processing task and has been developed by the gaming industry for rapid parallel processing. Tensorflow, by way of using a GPU, can be used to implement powerful neural network architecture that extract valuable information from large data sets. However, the steps to installing the newly updated tensorflow2-alpha version, released October 1st of this year , are less straightforward than most libraries. The GPU drivers, a collection of software that allows the GPU to communicate with the operating system, must have the correct version updates that tensorflow2, when it was developed, used. Little information existed online for which version of our Nvidia geforce 1080ti GPU card driver was needed to use tensorflow2 which required a numerous IT phone calls. However, as of now, our labs computer can now use the newly developed library making it easier to us deep learning techniques on open-sourced and custom datasets.