* Tensor flow is the Machine Learning Platform
* Kera is the API specification

Tensor flow installation

**Could not load dynamic library 'cudart64\_101.dll'; dlerror: cudart64\_101.dll**

A **GPU driver** is essentially software that handles communication between Windows 10, games and applications, and the graphics card component. It's very important. Luckily, regardless as to whether you're an **NVIDIA** fan or on team red with AMD, it's easy to install **drivers** with a new **GPU** and keep them updated.

To install the prerequisites for GPU support in TensorFlow 2.1:

1. Install your latest GPU drivers.
2. Install [CUDA 10.1](https://developer.nvidia.com/cuda-10.1-download-archive-base).
   * If the CUDA installer reports "you are installing an older driver version", you may wish to choose a custom installation and deselect some components. Indeed, note that software bundled with CUDA including GeForce Experience, PhysX, a Display Driver, and Visual Studio integration are not required by TensorFlow.
   * Also note that TensorFlow requires a specific version of the CUDA Toolkit unless you build from source; for TensorFlow 2.1 and 2.2, this is currently version 10.1.
3. Install cuDNN.
   * [Download cuDNN](https://developer.nvidia.com/rdp/cudnn-archive) v7.6.4 for CUDA 10.1. This will require you to sign up to the NVIDIA Developer Program.
   * Unzip to a suitable location and add the bin directory to your PATH.
4. Install tensorflow by pip install tensorflow.
5. You [may need to restart your PC](https://stackoverflow.com/a/51112550/604687).

**Could not load dynamic library 'cudnn64\_7.dll'; dlerror: cudnn64\_7.dll not found**