

CSE 597 Software Setup

This year, the recommended way to work on assignments is through [Google Colaboratory](#). However, if you already own GPU-backed hardware, you can run locally.

Working remotely on Google Colaboratory

Google Colaboratory is basically a combination of Jupyter notebook and Google Drive. It runs entirely in the cloud and comes preinstalled with many packages (e.g. PyTorch and Tensorflow) so everyone has access to the same dependencies. Even cooler is the fact that Colab benefits from free access to hardware accelerators like GPUs (K80, P100) and TPUs.

Requirements. To use Colab, you must have a Google account with an associated Google Drive.

Assuming you have both, you can connect Colab to your Drive with the following steps:

1. Click the wheel in the top right corner and select Settings.
2. Click on the Manage Apps tab.
3. At the top, select Connect more apps which should bring up a GSuite Marketplace window.
4. Search for Colab then click Add.

Workflow. Every assignment provides you with a download link to a zip file containing Colab notebooks and Python starter code. You can upload the folder to Drive, open the notebooks in Colab and work on them, then save your progress back to Drive.

Best Practices. There are a few things you should be aware of when working with Colab. The first thing to note is that resources aren't guaranteed (this is the price for being free). If you are idle for a certain amount of time or your total connection time exceeds the maximum allowed time (~12 hours), the Colab VM will disconnect. This means any unsaved progress will be lost. **Thus, get into the habit of frequently saving your code whilst working on assignments.** To read more about resource limitations in Colab, read their FAQ [here](#).

Using a GPU. Using a GPU is as simple as switching the runtime in Colab. Specifically, click Runtime -> Change runtime type -> Hardware Accelerator -> GPU and your Colab instance will automatically be backed by GPU compute.