

# Phase 2 VDCNN Multilabel Model Training Documentation

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ST1506: DSDA FINAL YEAR PROJECT

COMPANY PROFILING TEXT MINING

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# Synopsis

The purpose of this documentation is to demonstrate the steps a user should take to successfully run the ipython file for model training.

This documentation is for data scientists who want to see what the process of training the model is, and possibly to use their own data to train the model.

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## Running The Notebook - GPU

1. Upload “NLP\_VDCNN\_Multilabel.ipynb” to Google Collaboratory (i.e. Google Colab).
2. Under the Runtime tab, change runtime type to “GPU” and click “SAVE”. This will allow for faster running times when running the notebook so that time can be saved.

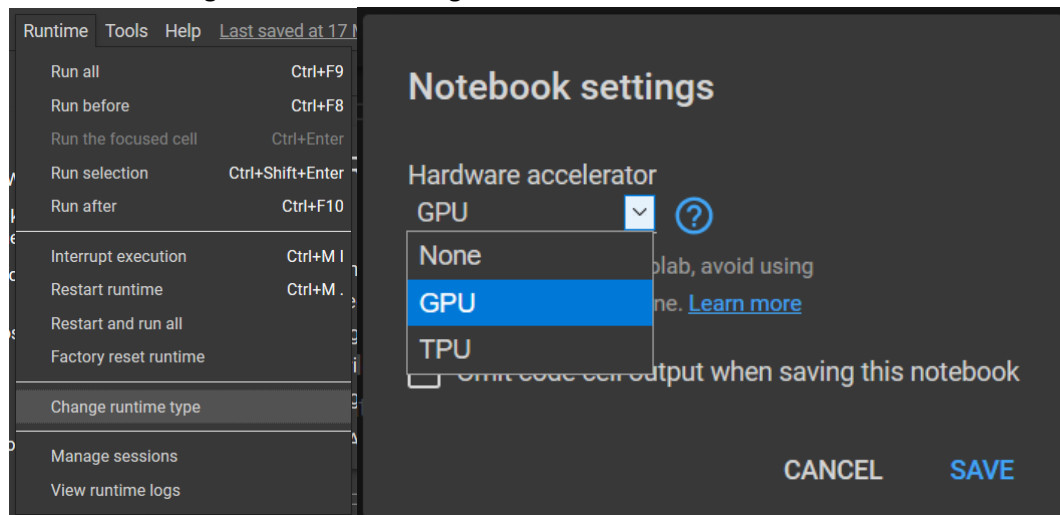


Figure 1: Changing Runtime to GPU

3. Connect to Colab runtime by clicking on the connect button found on the top right bar if not already converted. You should see the following if the connection is successful.

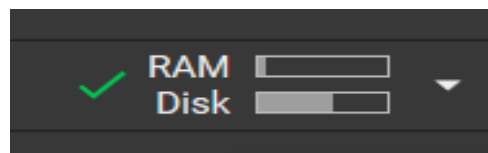


Figure 2: Ensuring runtime is connected

4. On the left tab, click on the icon of a folder and upload “clean\_dataset.xlsx”, “sector\_master\_definition.xlsx” and “val\_dataset.xlsx”. Once uploaded you should see that the files are in the temporary working directory in Google Colab.

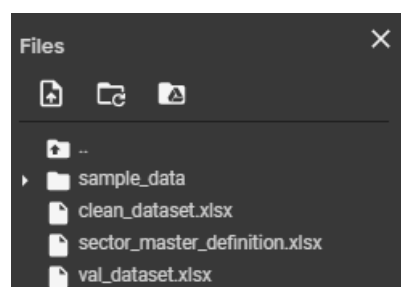
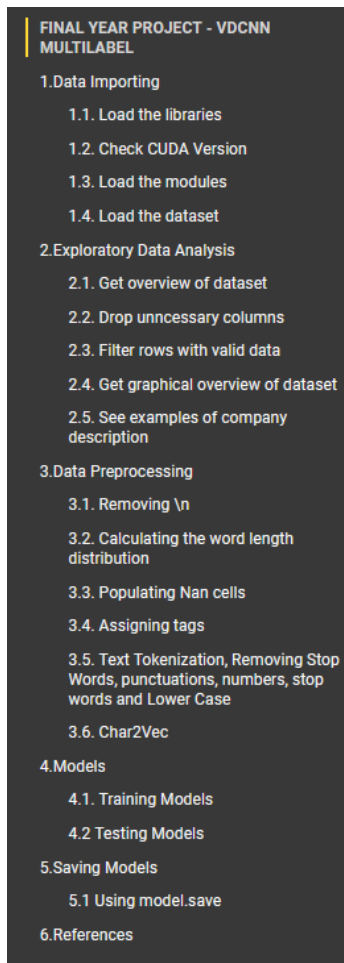


Figure 3: Uploaded excel data files

5. Now, the notebook is ready to run. Run the notebook cells one at a time starting from the start of Section 1, labelled as “Data Importing” until the end of Section 4, labelled as “Models”.



FINAL YEAR PROJECT - VDCNN MULTILABEL	
1.Data Importing	
1.1. Load the libraries	
1.2. Check CUDA Version	
1.3. Load the modules	
1.4. Load the dataset	
2.Exploratory Data Analysis	
2.1. Get overview of dataset	
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2.4. Get graphical overview of dataset	
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3.Data Preprocessing	
3.1. Removing \n	
3.2. Calculating the word length distribution	
3.3. Populating Nan cells	
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3.6. Char2Vec	
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5.Saving Models	
5.1 Using model.save	
6.References	

Figure 4: List of Contents to run

6. To save the model, run Section 5: Saving Model of the notebook.