Workshop: Deep Learning for Natural Language Processing

Description:
An introduction to natural language processing using Deep Learning models. An intuitive explanation of essential theory of deep learning and NLP is provided followed by interactive code demos. Examples feature Python and Keras, the high-level API for TensorFlow - the most popular Deep Learning library. Specifics of working with natural language data are covered, including how to convert natural language into numerical representations that can be readily processed by machine learning algorithms. Also, state-of-the art Deep Learning architectures are leveraged to make predictions with natural language data.

Skill Level:
Intermediate

Who is this presentation for?
Practitioners: Data scientist, natural language processing expert, data engineer, speech scientist
Leaders: VP data science, head of data science, director data science, data science leader

Learning for Audience:
• The Power and Elegance of Deep Learning for Natural Language Processing
• Word Vectors
• Modeling Natural Language Data
• Recurrent Neural Networks
• Advanced Models (LSTM)

Requirements:
• Experience in Python
• Shell and Bash commands
• Fundamentals of Deep Learning, NLP and Machine learning
• College calculus 101

Guidelines:

Code Location:
Download the code which will be used in the workshop from:
https://github.com/UnicomFinanceAI/DeepLearningForNaturalLanguageProcessing

Running Code:
The code can be executed at your laptop, at your server or at Google CoLab.
The instructor will not spend time to debug the code for your specific computation device. You are requested to download all libraries and environment on your device to ensure that the code runs.

The recommended way to run the code is on Google CoLab. This code is tested to run cleanly on Google CoLab. It is highly recommended that everyone opens an account and upload the provided code to
https://colab.research.google.com

Not only does this ensures the code execution, the computation power also runs it in optimal time.

Once the account is created you can transfer the code from Github to your Google drive. In your Google CoLab go to File > Open Notebook > Github and provide the repository location to transfer the code.
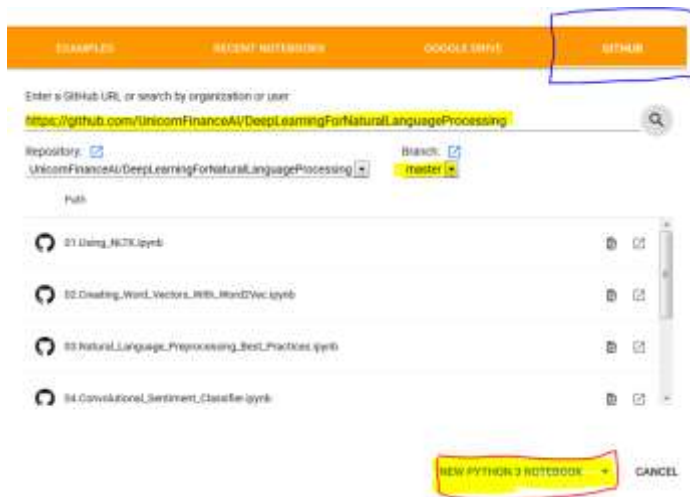
Alternatively, one can also download the files by opening

And then saving it in Google drive