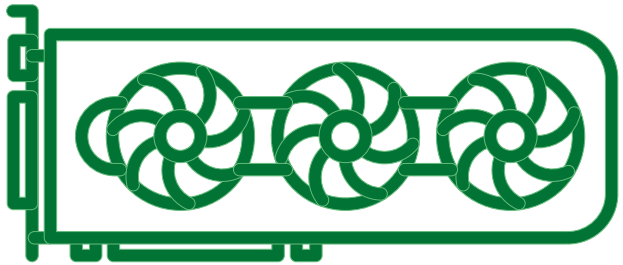
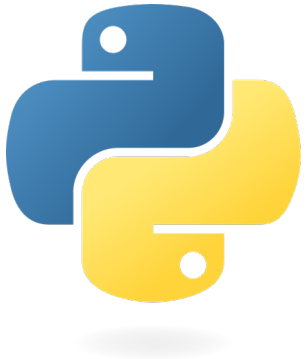
practicum

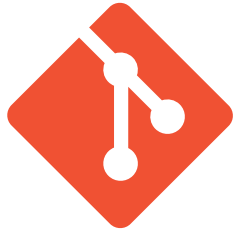
building ai knowledge

The Tools for AI

AI Development Tools

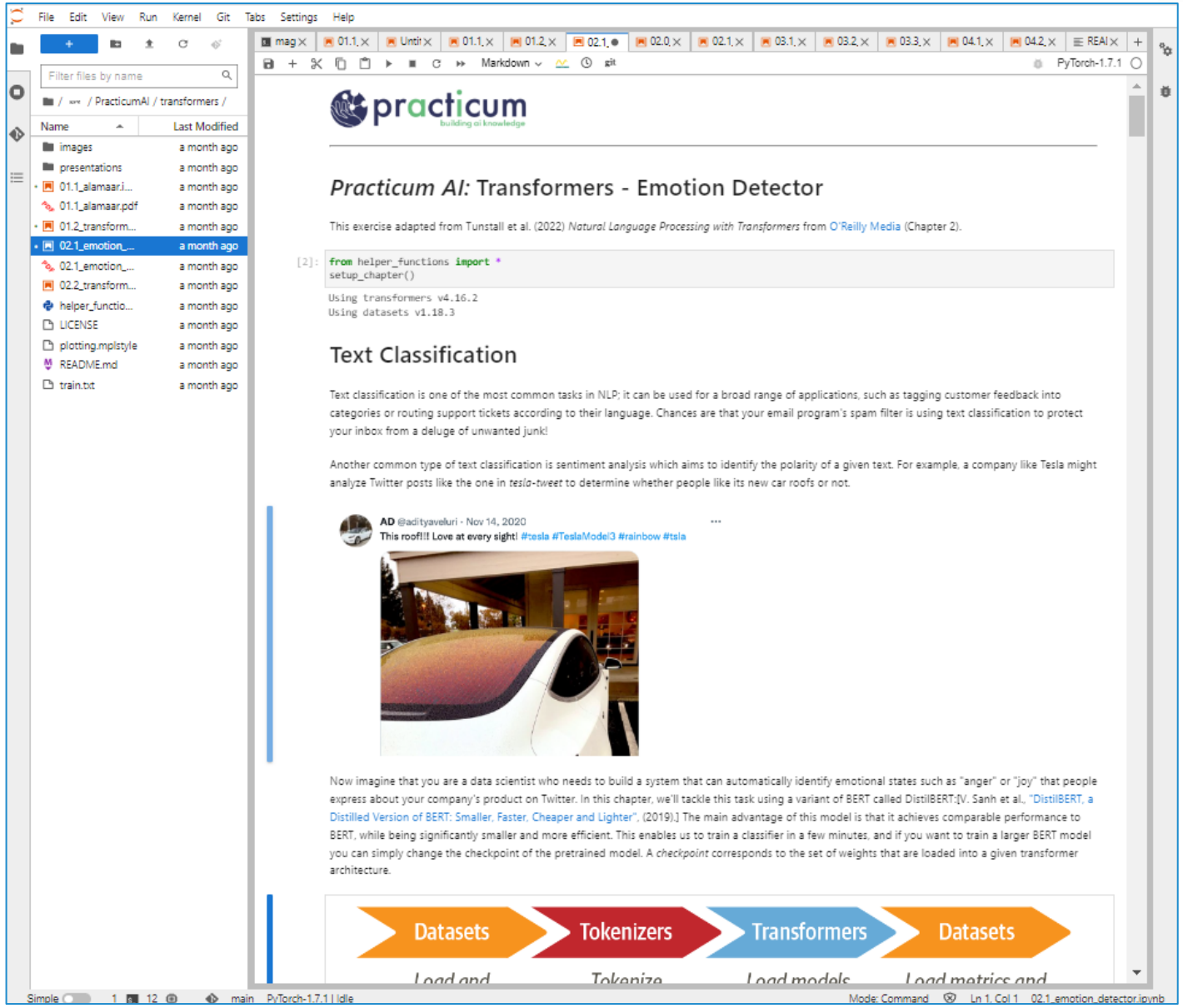






Jupyter


jupyter


File Edit View Run Kernel Git Tabs Settings Help
Filter files by name
/ PracticumAI / transformers /
Name
Last Modified
images a month ago
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01.1_alamaar.i... a month ago
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01.2_transform... a month ago
02.1_emotion_... a month ago
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LICENSE a month ago
plotting.mplstyle a month ago
README.md a month ago
train.txt a month ago
Markdown
PyTorch-1.7.1
practicum
Practicum AI: Transformers - Emotion Detector
This exercise adapted from Tunstall et al. (2022) Natural Language Processing with Transformers from O'Reilly Media (Chapter 2).
[2]:
from helper_functions import *
setup_chapter()
Using transformers v4.16.2
Using datasets v1.18.3
Text Classification
Text classification is one of the most common tasks in NLP; it can be used for a broad range of applications, such as tagging customer feedback into categories or routing support tickets according to their language. Chances are that your email program's spam filter is using text classification to protect your inbox from a deluge of unwanted junk!
Another common type of text classification is sentiment analysis which aims to identify the polarity of a given text. For example, a company like Tesla might analyze Twitter posts like the one in tesla-tweet to determine whether people like its new car roofs or not.
AD @adityaveluri · Nov 14, 2020
This roof!!! Love at every sight! #tesla #TeslaModel3 #rainbow #tsla
Now imagine that you are a data scientist who needs to build a system that can automatically identify emotional states such as "anger" or "joy" that people express about your company's product on Twitter. In this chapter, we'll tackle this task using a variant of BERT called DistilBERT:[V. Sanh et al., "DistilBERT, a Distilled Version of BERT: Smaller, Faster, Cheaper and Lighter", (2019).] The main advantage of this model is that it achieves comparable performance to BERT, while being significantly smaller and more efficient. This enables us to train a classifier in a few minutes, and if you want to train a larger BERT model you can simply change the checkpoint of the pretrained model. A checkpoint corresponds to the set of weights that are loaded into a given transformer architecture.
Datasets
Tokenizers
Transformers
Datasets
Simple
main
PyTorch-1.7.1 | Idle
Mode: Command
Ln 1, Col 1
02.1_emotion_detector.ipynb

git and GitHub.com

- Version control software tracks
  - Code
  - Datasets
  - Models
  - More
- Fosters reproducibility

NVIDIA

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aws

BAIDU AI CLOUD

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IBM Cloud

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ORACLE Cloud

Tencent Cloud

How do you access these resources?

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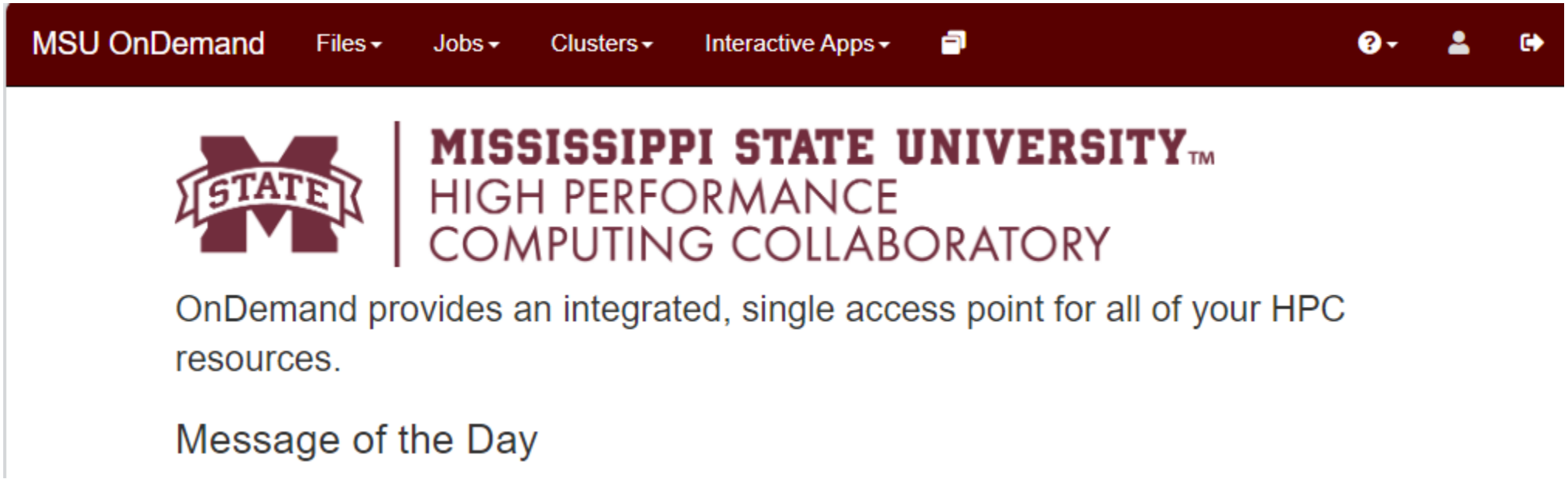

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High-Performance Computing

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