Transformers Notebooks

You can find here a list of the official notebooks provided by Hugging Face.

Also, we would like to list here interesting content created by the community. If you wrote some notebook(s) leveraging 🧐 Transformers and would like be listed here, please open a Pull Request so it can be included under the Community notebooks.

Hugging Face's notebooks 🧐



Documentation notebooks

You can open any page of the documentation as a notebook in colab (there is a button directly on said pages) but they are also listed here if you need to:

Notebook	Description		
Quicktour of the library	A presentation of the various APIs in Transformers	Open in Colab	€ Open Studio Lab
Summary of the tasks	How to run the models of the Transformers library task by task	Open in Colab	۩ Open Studio Lab
Preprocessing data	How to use a tokenizer to preprocess your data	Open in Colab	۩ Open Studio Lab
Fine-tuning a pretrained model	How to use the Trainer to fine-tune a pretrained model	Open in Colab	€ோ Open Studio Lab
Summary of the tokenizers	The differences between the tokenizers algorithm	Open in Colab	€ Open Studio Lab
Multilingual models	How to use the multilingual models of the library	Open in Colab	€ி Open Studio Lab
Fine-tuning with custom datasets	How to fine-tune a pretrained model on various tasks	Open in Colab	€ற Open Studio Lab

PyTorch Examples

Notebook	Description		
Train your tokenizer	How to train and use your very own tokenizer	Open in Colab	۩Open Studio Lab
Train your language model	How to easily start using transformers	Open in Colab	€0 Open Studio Lab
How to fine-tune a model on text classification	Show how to preprocess the data and fine-tune a pretrained model on any GLUE task.	Open in Colab	۩Open Studio Lab
How to fine-tune a model on language modeling	Show how to preprocess the data and fine-tune a pretrained model on a causal or masked LM task.	Open in Colab	்ற்றOpen Studio Lab

How to fine-tune a model on token classification	Show how to preprocess the data and fine-tune a pretrained model on a token classification task (NER, PoS).	Open in Colab	€0 Open Studio Lab
How to fine-tune a model on question answering	Show how to preprocess the data and fine-tune a pretrained model on SQUAD.	Open in Colab	€DOpen Studio Lab
How to fine-tune a model on multiple choice	Show how to preprocess the data and fine-tune a pretrained model on SWAG.	Open in Colab	€®Open Studio Lab
How to fine-tune a model on translation	Show how to preprocess the data and fine-tune a pretrained model on WMT.	Open in Colab	€BOpen Studio Lab
How to fine-tune a model on summarization	Show how to preprocess the data and fine-tune a pretrained model on XSUM.	Open in Colab	€DOpen Studio Lab
How to fine-tune a speech recognition model in English	Show how to preprocess the data and fine-tune a pretrained Speech model on TIMIT	Open in Colab	©POpen Studio Lab
How to fine-tune a speech recognition model in any language	Show how to preprocess the data and fine-tune a multi-lingually pretrained speech model on Common Voice	Open in Colab	©0 Open Studio Lab
How to fine-tune a model on audio classification	Show how to preprocess the data and fine-tune a pretrained Speech model on Keyword Spotting	Open in Colab	€¤Open Studio Lab
How to train a language model from scratch	Highlight all the steps to effectively train Transformer model on custom data	Open in Colab	€®Open Studio Lab
How to generate text	How to use different decoding methods for language generation with transformers	Open in Colab	€DOpen Studio Lab
How to generate text (with constraints)	How to guide language generation with user- provided constraints	Open in Colab	۩Open Studio Lab
How to export model to ONNX	Highlight how to export and run inference workloads through ONNX		
How to use Benchmarks	How to benchmark models with transformers	Open in Colab	€0 Open Studio Lab
<u>Reformer</u>	How Reformer pushes the limits of language modeling	Open in Colab	€DOpen Studio Lab
How to fine-tune a model on image classification	Show how to preprocess the data and fine-tune any pretrained Vision model on Image Classification	Open in Colab	ĈI¤Open Studio Lab

TensorFlow Examples

Notebook	Description		
<u>Train your tokenizer</u>	How to train and use your very own tokenizer	Open in Colab	۩ Open Studio Lab

<u>Train your language</u> <u>model</u>	How to easily start using transformers	Open in Colab	€ Open Studio Lab
How to fine-tune a model on text classification	Show how to preprocess the data and fine-tune a pretrained model on any GLUE task.	Open in Colab	ோ Open Studio Lab
How to fine-tune a model on language modeling	Show how to preprocess the data and fine-tune a pretrained model on a causal or masked LM task.	Open in Colab	۩ Open Studio Lab
How to fine-tune a model on token classification	Show how to preprocess the data and fine-tune a pretrained model on a token classification task (NER, PoS).	Open in Colab	۩ Open Studio Lab
How to fine-tune a model on question answering	Show how to preprocess the data and fine-tune a pretrained model on SQUAD.	Open in Colab	۩ Open Studio Lab
How to fine-tune a model on multiple choice	Show how to preprocess the data and fine-tune a pretrained model on SWAG.	CO Open in Colab	۩ Open Studio Lab
How to fine-tune a model on translation	Show how to preprocess the data and fine-tune a pretrained model on WMT.	Open in Colab	۩ Open Studio Lab
How to fine-tune a model on summarization	Show how to preprocess the data and fine-tune a pretrained model on XSUM.	Open in Cofab	۩ Open Studio Lab

Optimum notebooks

Optimum is an extension of Transformers, providing a set of performance optimization tools enabling maximum efficiency to train and run models on targeted hardwares.

Notebook	Description		
How to quantize a model with ONNX Runtime for text classification	Show how to apply static and dynamic quantization on a model using <u>ONNX Runtime</u> for any GLUE task.	Open in Colab	€B0pen Studio Leb
How to quantize a model with Intel Neural Compressor for text classification	Show how to apply static, dynamic and aware training quantization on a model using <u>Intel Neural Compressor (INC)</u> for any GLUE task.	CO Open in Colab	€DOpen Studio Lisb

Community notebooks:

More notebooks developed by the community are available <u>here</u>.