# Natural Language Generation

# Textbook

Denis Rothman - Transformers for Natural Language Processing\_ Build innovative deep neural network architectures for NLP with Python, PyTorch, TensorFlow, BERT, RoBERTa, and more-Packt Publishing Ltd

# Text Generation with OpenAI GPT-2

## [code](https://github.com/PacktPublishing/Transformers-for-Natural-Language-Processing.git)

OpenAI wanted to create a task-agnostic model. They began to train transformer models on raw data instead of relying on labeled data by specialists. Labeling data is time-consuming and considerably slows down the transformer's training process.

The first step was to start with unsupervised training in a transformer model. Then, only to fine-tune the model's supervised learning.

Humans learn a language and then apply that knowledge to a wide range of NLP tasks through transfer learning. The core concept of a T5 model is to find an abstract model that can do things like us.

Hugging face [model](https://huggingface.co/models)

Hugging face [dataset](https://huggingface.co/datasets)

Hugging face [metrics](https://huggingface.co/metrics)

# Text summarization with T5

## installation

* Pip install transformers==4.0.0
* Pip install sentencepiece==0.1.94
* *pip install torch==1.4.0*
* conda install pytorch torchvision torchaudio cpuonly -c pytorch