

# **Lab 6. Intro to the Hugging Face Transformers Library**

LING-581-Natural Language Processing 1

---

Instructor: Hakyung Sung

October 23, 2025

# Introduction

- This session provides a hands-on introduction to the **Hugging Face Transformers** Python library.



**Hugging Face**

- On Tuesday, we explored the conceptual architecture of the Transformer model.

# Background

- On Tuesday, we explored the conceptual architecture of the Transformer model.
- In practice, you don't need to understand every detail to use it — just as you don't need to know how every part of a car works in order to drive it.

- We'll explore common patterns for leveraging pretrained transformer models in NLP projects.
- The Hugging Face ecosystem offers powerful resources, including:
  - Access to thousands of pretrained models

- We'll explore common patterns for leveraging pretrained transformer models in NLP projects.
- The Hugging Face ecosystem offers powerful resources, including:
  - Access to thousands of pretrained models
  - Model-specific tokenizers and ready-made pipelines for tasks such as text classification, question answering, and translation

- We'll explore common patterns for leveraging pretrained transformer models in NLP projects.
- The Hugging Face ecosystem offers powerful resources, including:
  - Access to thousands of pretrained models
  - Model-specific tokenizers and ready-made pipelines for tasks such as text classification, question answering, and translation
  - A separate datasets package with curated datasets and evaluation metrics

- We'll explore common patterns for leveraging pretrained transformer models in NLP projects.
- The Hugging Face ecosystem offers powerful resources, including:
  - Access to thousands of pretrained models
  - Model-specific tokenizers and ready-made pipelines for tasks such as text classification, question answering, and translation
  - A separate datasets package with curated datasets and evaluation metrics
  - Implementations in PyTorch (which we'll focus on), TensorFlow, and Flax



- `https://www.youtube.com/watch?v=00GKzGyWFEs&list=PLo2EIpI_JMQvWfQndUesu0nPBAtZ9gP1o`

Let's get your hands dirty!  
*Submitted by* Tomorrow 11:59 PM