# **Lesson Plan 1: Introduction to Hugging Face**

# **Learning Objectives:**

- Understand the open source pre-trained models and their importance in Al.
- Learn how to explore and select models from the Hugging Face Hub.
- Gain basic knowledge on how to use Hugging Face models for inference.

# **Key Vocabulary:**

- · Pre-trained models
- Hugging Face Hub
- Inference

### **Lesson Outline:**

- Direct Instruction (10 minutes):
- Introduction to open source pre-trained models.
- Overview of the Hugging Face Hub and its features.
- Demonstration of how to search for models and understand their capabilities.
- Engaging Activity (15 minutes):
- Group activity: Students explore the Hugging Face Hub and select a model that interests them. They then discuss its application and potential use cases.
- Individual activity: Students use the selected model for a simple inference task, such as text classification or sentiment analysis, using the Hugging Face Inference API.
- Closure (5 minutes):
- Summary of key points discussed.
- Encouragement for students to continue exploring the Hugging Face Hub and experimenting with different models.

# **Assessment of Learning:**

- Quiz on the concepts of pre-trained models and the Hugging Face Hub.
- Python app using their chosen model and its potential applications.

### Quickstart

We're on a journey to advance and democratize artificial intelligence through open source and open science.

https://huggingface.co/docs/huggingface\_hub/en/quick-start

### Run Inference on servers

We're on a journey to advance and democratize artificial intelligence through open source and open science.

https://huggingface.co/docs/huggingface\_hub/guides/inference

# Inference Endpoints

We're on a journey to advance and democratize artificial intelligence through open source and open science.

https://huggingface.co/docs/huggingface\_hub/guides/inference\_endpoints

### Create and share Model Cards

We're on a journey to advance and democratize artificial intelligence through open source and open science.

https://huggingface.co/docs/huggingface\_hub/guides/model-cards

### Safetensors

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https://huggingface.co/docs/safetensors/index

# **PEFT**

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https://huggingface.co/docs/peft/index

# Transformers

We're on a journey to advance and democratize artificial intelligence through open source and open science.



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