











## **Transformation by Hugging Face**

Published on June 2, 2022

Edit article

✓ View stats



(Image source: Pixabay)



Yogesh Kulkarni

Principal Architect (CTO Office, Icertis) | PhD in Geometric Modeling | Google Developer Expert (Machine Learning)

12 articles

Are you lost in the storm of these BERTs ie ALBERT, DistilBERT, RoBERTa etc? And these GPTs (1-2-3)? Don't understand how they work? What they do? How to use? Worry not. Try Hugging (a) Face and Smile(y)!!















Software Engineers know (or are supposed to know) Github, similarly, Data Scientist are now supposed to know, Hugging Face.

It's an open-source repository of Machine Learning models, with an easy interface to deploy and use. All that, for free!!

Here are a few quick examples, 'Hello World' for learning the 'Hugging' Face' way:

Say, for the following text,

```
text = """Hey Jack, I just wanted to flag something with you.
said that you didn't want to watch the move Twilight with me,
```

lets do sentiment analysis:

```
from transformers import pipelin
classifier = pipeline("text-classification", model="distilbert
outputs = classifier(text)
print(outputs)
```

The prediction comes out as 'Negative (0.912)'!! Great!!

For the same text, NER (Named-entity recognition):

```
outputs = ner_tagger(text)
```











## The output is:

'Jack': PER: 0.98

'Twilight': MISC: 0.996

'Sophie': PER: 0.6149

And on the same text, here is Question Answering:

The answer given is 'Twilight (0.9831)'.

Isn't it amazing?

Today, Hugging Face platform offers more than 100,000 pre-trained models and 10,000 datasets for NLP, computer vision, speech, timeseries, biology, reinforcement learning, chemistry and more.

Hall of Fame for the platform is its 'transformer' library, a collection of models based on Transformer architecture introduced by Google (remember 'Attention is all you need'?) and furthered by many, like OpenAI. Transformers have taken NLP to the next level. But the problem is that training of these humongous models is not possible for mere mortals but only the giants who can run deep networks and have















build passing license Apache-2.0 website online release v2.0.0

If for a user, who does not know programming, s/he can use the platform in an inference mode, via Web App/call. If you are a Data Science programmer, you can call these ready models from code and can also build custom models on top using your own data. If you are a Data Science researcher, you can create new networks/models and upload them for the remaining world to use. Hugging Face is 'ML for All'. While it provides free/open access of ML, it is also striving to make it 'Good' (ie Ethical), trying to avoid models based on biased data.

A new initiative by Hugging Face is BigScience, a community of 1000s of researchers from different disciplines, to build the world's largest open-source multilingual language model.

Give it a try and let me know your comments...

## References

- 1. Hugging Face A Step Towards Democratization (link)
- 2. Introduction to Transformers and Hugging Face (link)
- 3. A complete Hugging Face tutorial (link)
- 4. The official website (link)











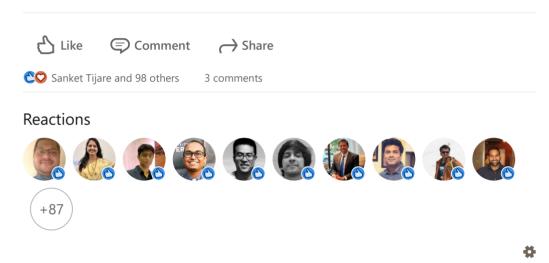


Principal Architect (CTO Office, Icertis) | PhD in Geometric Modeling | Google Developer Expert (Machine Learning)
Published • 1mo

Hugging Face has transformed the AI (Artificial Intelligence) scene by democratizing access to the latest-and-greatest Machine/Deep Learning models. Below is my article introducing the platform.

Julien Chaumond Thomas Wolf & Abhishek Thakur Merve Noyan Clem Delangue Anuj Syal Towards Data Science Sergios Karagiannakos Charles O'Neill

#ml #machinelearning #nlp #naturallanguageprocessing #ai #artificialintelligence #datascience #deeplearning #neuralnetworks #data #opensource #tech #Innovation #technology #images #computervision #bert #transformer #huggingface



## 3 Comments

Most relevant ▼



Add a comment...





1mo •••



Amar Doshi • 1st

IT Advisor, Consultant, Software Designer & Developer

https://www.tensorflow.org/hub

TensorFlow Hub is a repository of trained machine learning models.

Like · 🖒 1 Reply



shyambhu mukherjee • 1st

Data Scientist at iQuanti, Inc | NLP enthusiast| Mentor at Mentorbruh

This is one of the simplest intros to huggingface I have ever read. Could you please write one focused on the deployment part sir?

Like · 🖰 1 Reply · 1 Reply



Yogesh Kulkarni • You

Principal Architect (CTO Office, Icertis) | PhD in Geometric Modeling | Google

1mo \*\*\*

1mo \*\*\*