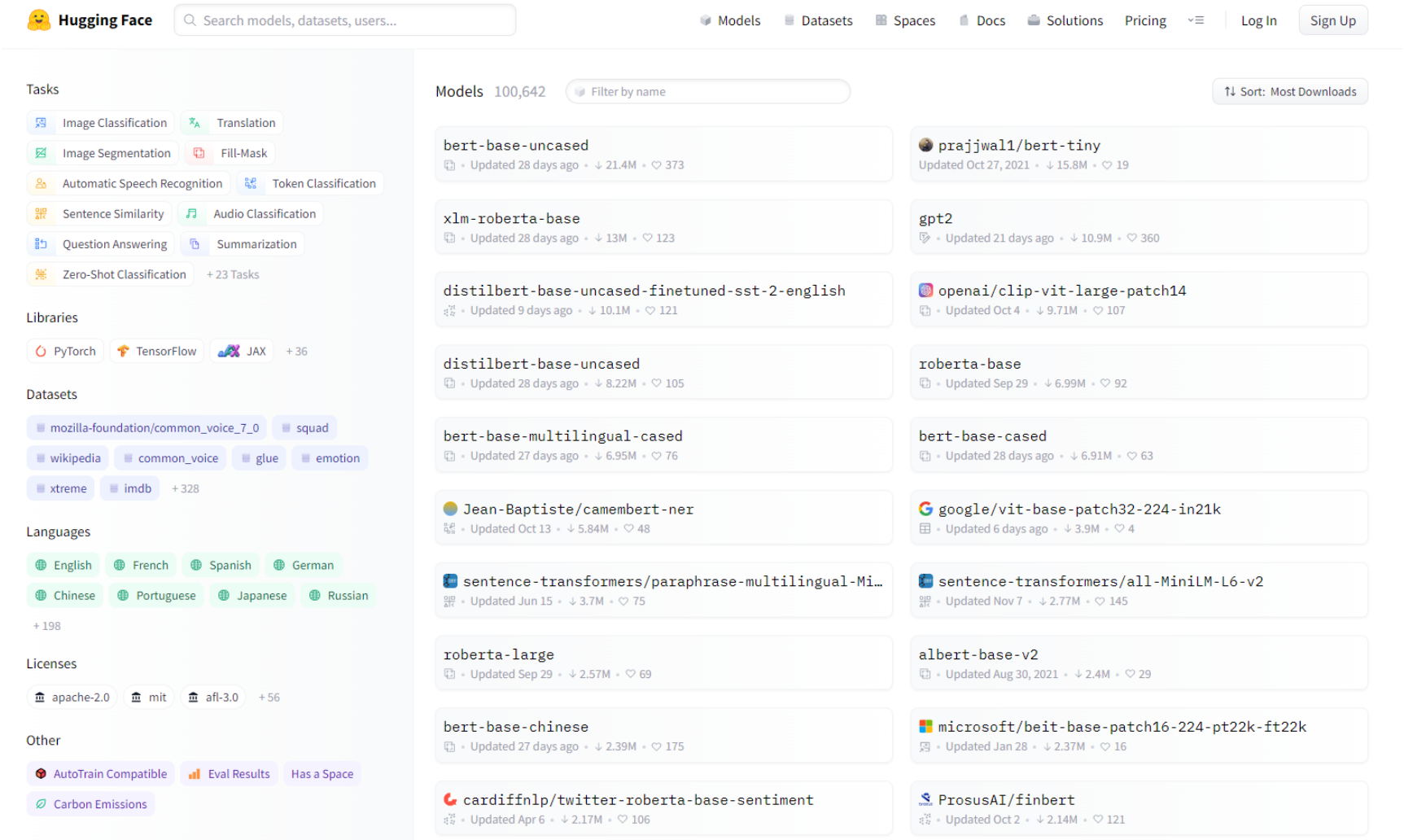
Using the Transformer

Add-On: Which model to use?

Learning goals

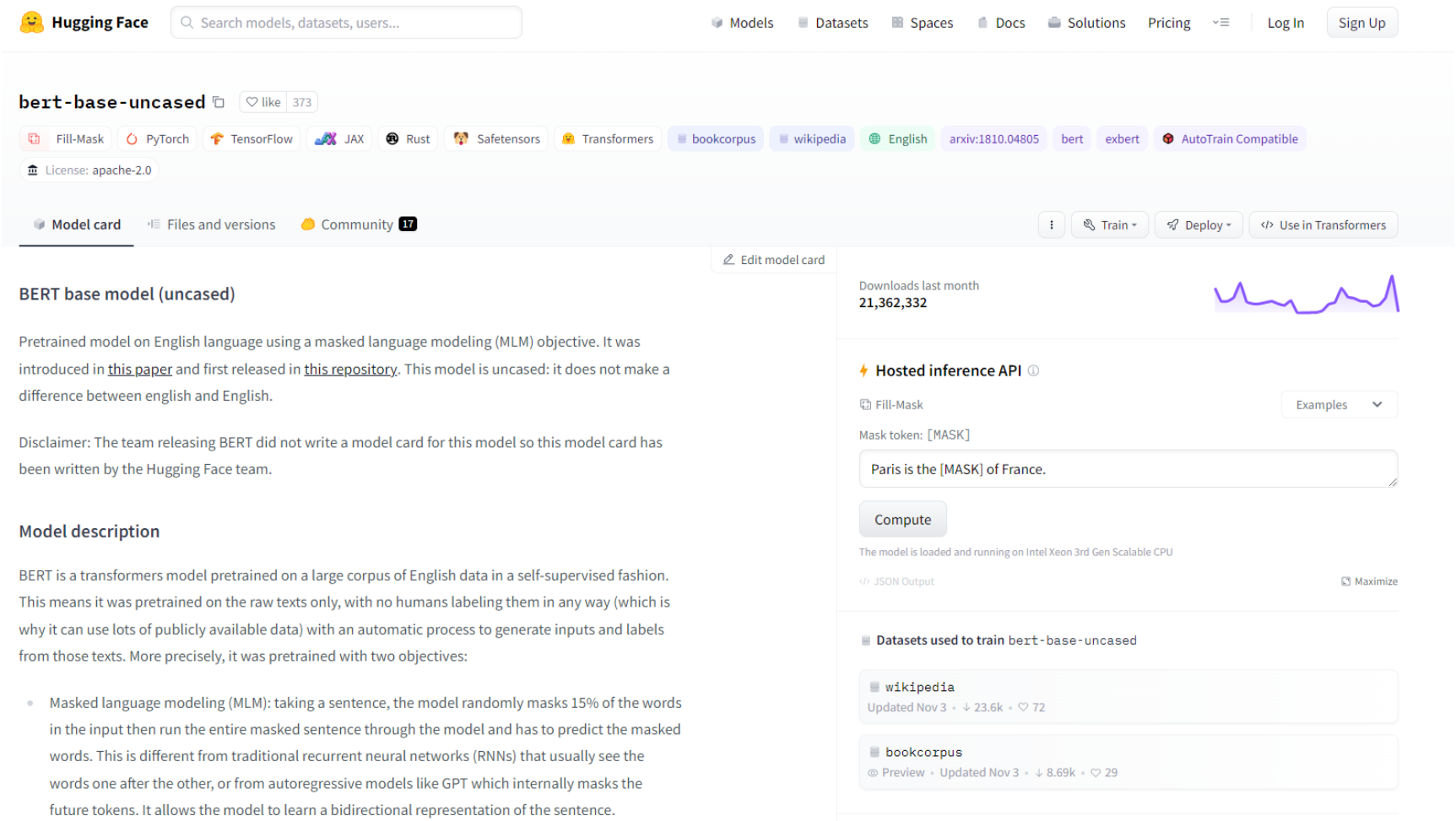
- Huggingface model hub
- Grasp the difficulty of model choice

THE HUGGINGFACE HUB



A SINGLE MODEL

Example: `https://huggingface.co/bert-base-uncased`



MODEL RECYCLING

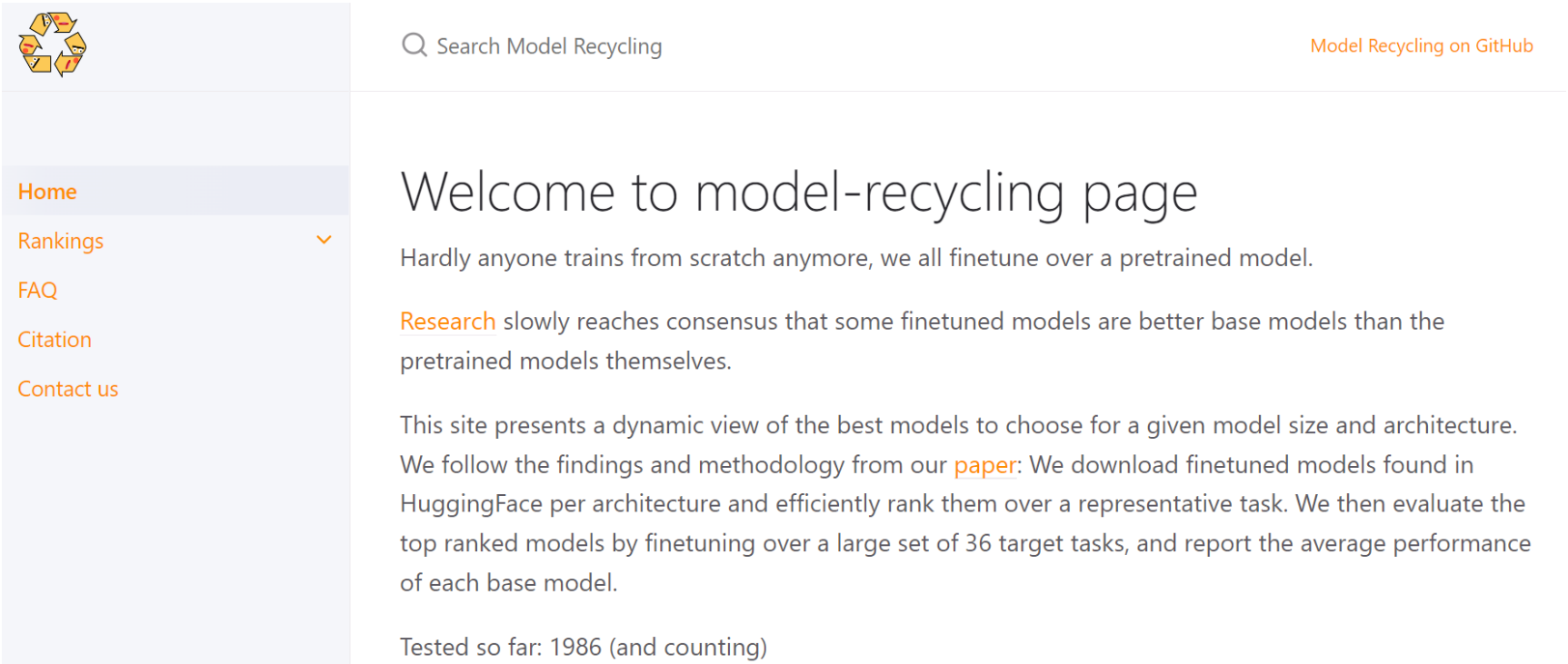
A variety of models:

- Everyone can push his/her fine-tuned model to the hub
- Result: A multitude of different models available for each architecture

→ *Burning Question:* Which one should I use??

- The "original" pre-trained version
- A fine-tuned model on a similar task
- An ensemble?
- An averaged model?
- Something else?

MODEL RECYCLING



Project website: `https://ibm.github.io/model-recycling/`

Paper: `https://arxiv.org/pdf/2211.00107.pdf`

MODEL RECYCLING

Best models per architectures

Pretrained	Best model	Avg.	Pretrained Avg.	Ranking
roberta-base	ibm/ColD-Fusion-itr13-seed2	78.72	76.22	link
bert-base-uncased	ffgcc/InfoCSE-bert-base	74.28	72.20	link
bert-base-cased	Dylan1999/bert-finetuned-squad-accelerate	74.07	72.43	link
t5-base	adit94/nlpcharade	78.23	75.45	link
google/t5-v1_1-base	anshoomehra/t5-v1-base-s2-auto-qgen	74.27	68.82	link