

# Review: New Paradigms in NLP

We have already learned about *Transfer Learning*

- adapting/fine-tuning an existing model to perform a new task

This concept has been made more powerful in NLP through the paradigm known as *Unsupervised Pre-training + Supervised Fine-tuning*.

This typically involves *someone else* having spent tremendous resources

- to pre-train Large Language Model with a great number (trillion !) of weights

A down-stream user can *fine-tune* the model to a new task at much lower cost/effort.

This is likely the future of NLP.

Beyond this: Large Language Models have shown *Zero-shot Learning* capabilities

- adapting to perform a new task
- for which it was **neither** trained nor fine-tuned (Transfer Learning)
- by being shown a few (sometimes zero !) examples of the new task
  - **at run-time**

# Learning to learn

- [The new paradigm: Pre-Trained LM + Fine-Tuning \(NLP Language Models.ipynb#Language-Models:-the-future-\(present-?\)-of-NLP-?\)](#)
- [A Universal Model/API \(NLP Universal Model.ipynb\)](#)
- [Beyond the LLM \(NLP Beyond LLM.ipynb\)](#)
- [From LLM to Bing Search \(From GPT to BingSearch.ipynb\)](#)

