

# #1. BATCH LEARNING

- All of your data exists in a big static warehouse and you train a model on it.
- You may train a new model once per month once you get new data.
- Learning may take a while and isn't done often.
- Runs in production without learning (though can be retrained later).

## ONLINE LEARNING

- Your data is constantly being updated and you constantly train new models on
- Each learning step is usually fast and cheap (as opposed to batch learning).
  Runs in production and learns
- continuously.

# TRANSFER LEARNING

- Take the knowledge one model has learned and use it with your data.
  Gives you the ability to leverage SOTA (state of the art) models for your own problems.

# #4. ACTIVE LEARNING

- Also referred to as 'human in the loop' learning.
- A human expert interacts with a model and provides updates to labels for samples which the model is most uncertain about.

# **ENSEMBLING**

- Not really a form of learning.
  More combining algorithms which have already learned in some way to get better results.

#### **SUMMARY**

- BATCH LEARNING
- ONLINE LEARNING
- TRANSFER LEARNING
- ACTIVE LEARNING
- ENSEMBLING