**Static vs. Dynamic Training**



Broadly speaking, there are two ways to train a model:

* A **static model** is trained offline. That is, we train the model exactly once and then use that trained model for a while.
* A **dynamic model** is trained online. That is, data is continually entering the system and we're incorporating that data into the model through continuous updates.

Static Model -- Trained Offline

* Easy to build and test -- use batch train & test, iterate until good.
* Still requires monitoring of inputs
* Easy to let this grow stale

Dynamic Model -- Trained Online

* Continue to feed in training data over time, regularly sync out updated version.
* Use progressive validation rather than batch training & test
* Needs monitoring, model rollback & data quarantine capabilities
* Will adapt to changes, staleness issues avoided