Our goal is to find out what is the most likely model for predicting transition

How do we actually evaluate a predicted transition???

Use hand labeled data

1. Transition as defined in Yang paper
   1. Find the ips in t-1, t, t+1
      1. Can calculate directly
2. Use features to predict
   1. Features are time of day, join/leave, devices online,

Their objective is the signal cost

CO\_t = AX\_t + D(Y\_t-1 – (Y\_t – X\_t))

This paper used signal cost for two distributions

1. The training phase, produces signal costs for X data points
2. Randomly generated data, calculated signal costs.
3. The evaluation is done by comparing the signal costs distribution of 1 & 2.

Recap of meeting between Shidan & Steve

1. Clarify the goal of modeling
   1. Given the training set, predict the user’s behavior on the network, i.e. when the user is on which network, for how long.
   2. Validate the prediction using validate set
2. Evaluation
   1. What we want to know
      1. Number of network transitions
      2. User’s total online time
      3. Predict exactly when the user is on which network
      4. Etc.
3. Focus is on multiple models.
4. Decided to keep the current software framework: python + pymc3
5. Next meeting on Monday 11/30 11:00 AM
   1. Need to produce rough draft of paper
   2. Working Model