### Problem
Goal: build dialog systems that allow users to speak freely. Automatic speech recognition (ASR) is a big issue (typical ASR error rate in dialog ~30%)

### Approach
Two-pass ASR approach:
1. predict presence of task-relevant concepts in user utterances using:
   1. **lexical features recognized by the first-pass of the ASR**
   2. dialog history features
   3. prosodic features from the user’s speech
2. Adapt language model to the predicted content

### Result
We achieve statistically significant (but small) improvements in second-pass ASR accuracy for one dialog context; plan to expand to others