How to track context (an easy way)

- Both intent classifier and slot tagger need context (what happened before)

- Let's add simple **features** to both of them:
  - Previous utterance intent as a categorical feature
  - Slots filled in so far with binary feature for each possible slot
- Improves slot tagger F1 by 0.5%
- Reduces intent classifier error by 6.7%

- A better way: memory networks

http://www.cs.toronto.edu/~aditya/publications/contextual.pdf