## Building a state of the art speech recognizer

- 1. The classical approach to speech recognition
- Preprocessing
- f-bank features
- Hidden Markov Models
- Gaussian mixture models
- DNN
  - Stochastic gradient descent
- 2. RNN
- LSTMs
- 3. Tensor-flow
- 4. Listen, Attend and Spell
- The listener
- Attend and spell
- Training