**Human-Oriented Robotics** — Winter term 2013/2014
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# Exercise 8: Hidden Markov Models

The Matlab folder contains the solution for this exercise: the Matlab script `Ex8Solution.m`

### Exercise 8.1: Forward-Backward Algorithm

In this exercise initially we compute the HMM parameters. We use the command `hmmgenerate` to generate a random state and observation sequence given the transition matrix and the observation matrix. Then the forward-backward steps are reported.

### Exercise 8.2: Viterbi Algorithm

The Viterbi algorithm is at the bottom of the script, divided in two parts: first an initialization one and then the reconstruction of the most likely sequence.

At the end of the scripts you find all the requested plots.