Universidade Federal de Minas Gerais - Programa de Pós-Graduação em Engenharia Elétrica

EEE945 - INTRODUÇÃO AOS PROCESSOS ESTOCÁSTICOS

HOMEWORK 4

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Problem 1. Define a hidden Markov model of your choice with a 6×6 transition matrix A and a 6×4 observation matrix B. Simulate this model in order to obtain an observation sequence Y_0^{100}. Apply the *forward-backward* algorithm, Viterbi's algorithm and the Baum-Welch algorithm to this data set. In your solution, compare the filtered states with the real ones known from simulation.