

# INF519 Machine Learning 2: Homework 4

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## Hidden Markov Model (HMM)

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October 20, 2017

**Evaluation:** Upload your report and python script(s) (in group of up to 3 people) to the course website available in the campus.ece.fr.

**Due:** Thursday October 26, till 23h55m

**Remark:**

- No late homework will be accepted.
  - No plagiarism. If plagiarism happens, both the “lender” and the “borrower” will have a zero.
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### 1 Tasks

1. Implement yourself the HMM algorithm for the **Example 1** given in class as if you are solving the learning problem. That is, suppose that you only have the sequence of visible states and find the optimal sequence of hidden states, the transition and emission probabilities.
2. Compare your results to those that were used in this example.

### 2 Deliverables

1. A brief report that contains:
  - Description of the problem
  - Methods
  - Results
  - Discussion on the results
2. Python script(s).
3. Data files.

**Important Note:** Send these files zipped with your names as follows:

**inf519\_2017\_hw4\_studentsNames.zip**

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