Report on Project 2

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Status of project

1. We have implemented both the Viterbi algorithm and the forward-backward algorithm with success.

2. In order to avoid underflow problems we use the log transformation for the Viterbi algorithm and we have implemented both scaling and a log transformation for the forward-backward algorithm.

3. In addition we have implemented the limited memory approach and only saving $\sqrt{N}$ columns in memory for both viterbi and forward-backward and reconstructing blocks as needed.

Validation of program

We have used the provided test data to validate our implementation, and all numbers and sequences computed by our program agree with the provided test output files.

Source code

Source code is available at github : `https://github.com/dalgaard/MLiB/tree/master/project2`