MIR Assignment

Download and install Sonic Visualizer: http://www.sonicvisualiser.org/

Search, download and install the Queen Mary Vamp plugins for SV.

Download and install Matlab from the program kiosk of UiO: https://kiosk.uio.no/

Download and install the MIR toolbox for Matlab: https://www.jyu.fi/hytk/fi/laitokset/mutku/en/research/materials/mirtoolbox
or search online for "MIR toolbox Matlab"

Load 2 short excerpts (~30sec) of a music file in SV.

Manually annotate the onsets of events and beat positions in two separate layers.

Use the "bar and beat tracker: beat" plugin to track the beat positions.

Export all data as text files and load them in Matlab.

Using [miraudio (filename)] load the same audio file in Matlab.

Use the [mirevents] and [mirgetdata] or [get] functions of the toolbox to detect the onsets.

Evaluate the performance of the beat detection plugin and the mirevents function by comparing their output to your own annotations:

    Create a matlab script to automatically compare the arrays OR manually count the false positive and false negative for each case.

    Calculate a an evaluation score (suggested F measure)

Write a report on the method and results of the evaluation. Speculate about the weaknesses of the algorithms.