Part 2. Matlab implementation and evaluation

6. Choose one advanced and one simpler algorithm to implement in Matlab. Use the knowledge from part one of the course. Also, the teacher can here provide some suggestions regarding algorithms.

7. Using Matlab, implement, test and evaluate your algorithms in different background environments (no noise, computer noise, cocktail noise, car noise, music) and different background noise levels by simple mixing (adding files with different strengths). Some sound files are provided by the teacher. Students are encouraged to record more examples of background noise.

8. Expand your report on the survey to include a description of your two Matlab implementations. Elaborate on why you have chosen these and refrained from others. Append the Matlab code, which should be commented and explained. The report should not be sent to the teacher in this step.

9. Expand your report with a performance evaluation, both for the advanced and the simpler method. The report should not be sent to the teacher in this step.

10. Select which algorithm you are going to try to implement as an app and keep in mind to keep it simple enough. Maybe the simpler algorithm with some simplified key features from the advanced algorithm will do?

11. Send in the complete theoretical report together with your implementation, and motivate your choice of algorithm to implement as an app. Hereby the first two parts of four of the course are completed (when approved). This should typically be done after half-time of this summer course, but may take somewhat more time if needed.