

ASR Coursework Lab 2017–2018

Feedback for: s1788674, s1580425

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Total Mark: 91/100

1 Monophone models

1.1 Number of Gaussian mixture components [15/15]

- Design of experiment
 - Range and resolution of the number of Gaussians is very good
 - The actual optimal number of Gaussians is reported
 - Log likelihoods on training and test sets are reported
 - Run time is reported
 - Very good analysis of real-time factor
- Presentation of results
 - Experimental conditions shown clearly, allowing reproduction of experiments
 - The results are very well summarised with graphs/tables
- Discussions and quality of report
 - Theory and experimental points are described, reported and discussed well
 - Easy to read
 - The structure of the report is clear
 - Adding an abstract/introduction would be good
 - Try to distribute your text and figures on the whole pages
 - Very good discussions across the whole report, well done!

1.2 Different acoustic features [14/15]

- Design of experiment
 - The design of the experiment is very good
- Presentation of results
 - Experimental conditions shown clearly, allowing reproduction of experiments
 - The results are very well summarised with graphs/tables
- Discussions
 - Theory and experimental points are described, reported and discussed well
 - Why do you think FBank features do not perform that well in a GMM-HMM setup?

1.3 Dynamic features [10/10]

- Design of experiment
 - The design of the experiment is very good, the investigation of delta and delta-delta is done properly
- Presentation of results
 - The results are very well summarised with graphs/tables
- Discussions
 - Theory and experimental points are described, reported and discussed very well

1.4 CMN/CVN [10/10]

- Design of experiment
 - The design of the experiment is very good, the investigation of CMN and CVN is done properly
- Presentation of results
 - The results are very well summarised with graphs/tables
- Discussions
 - Theory and experimental points are described, reported and discussed very well

2 Tied-state triphone models [22/25]

- Design of experiments
 - The design of the experiment is very good
 - Range and resolution of the number of Gaussians is very good
 - Range and resolution of the number of clusters is very good
 - The actual optimal number of Gaussians and the optimal number of clusters are reported
 - Likelihoods and runtime not reported
- Presentation of results
 - Experimental conditions shown clearly, allowing reproduction of experiments
 - The results are very well summarised with graphs/tables
- Discussions
 - Theory and experimental points are described, reported and discussed very well
 - More thorough discussions (likelihoods, runtime) would result in a higher mark

3 Advanced tasks [20/25]

3.1 Gender adaptation

- Design of experiment
 - The design of the experiment is very good
- Presentation of results
 - The results are very well summarised with graphs/tables
- Discussions
 - Theory and experimental points are described, reported and discussed very well
 - Doing more advanced experiments would result in a higher mark