Experiments:

For the following experiments 1-5: Trained a GMM based tri-phone acoustic model on the first 600 sentences of the corpus (PRUS.txt) and tested it on the rest of 108 sentences of the corpus of each specific speaker, so 5 different models (SP1-SP5). Used LM1.gz while decoding.

Experiment No. 1

Experiment Type: Single Speaker

Train/Test Details: 600:108 split (SP1 21100130)

Best WER: %WER 80.37 [1216 / 1513, 243 ins, 22 del, 951 sub]

Experiment No. 2

Experiment Type: Single Speaker

Train/Test Details: 600:108 split (SP2 21100320)

Best WER: %WER 82.15 [1243 / 1513, 222 ins, 31 del, 990 sub]

Experiment No. 3

Experiment Type: Single Speaker

Train/Test Details: 600:108 split (SP3 21100170)

Best WER: %WER 81.36 [1231 / 1513, 182 ins, 52 del, 997 sub]

Experiment No. 4

Experiment Type: Single Speaker

Train/Test Details: 600:108 split (SP4 21100297)

Best WER: %WER 84.93 [1285 / 1513, 73 ins, 173 del, 1039 sub]

Experiment No. 5

Experiment Type: Single Speaker

Train/Test Details: 600:108 split (SP5 21100197)

Best WER: %WER 83.61 [1265 / 1513, 236 ins, 38 del, 991 sub]

Experiment No. 6

Experiment Type: Multi Speaker

Train/Test Details: *Trained a GMM based tri-phone acoustic model on the first 600 sentences of each speakers' corpus (combine first 600 sentences of each member to form one large training corpus) and test it on the rest of the 108 sentences of each speaker's corpus (combine 108 sentences of each member to form one testing corpus). Used LM1.gz while decoding. 108 sentences of the corpus will still be unseen as before so WER scores will remain high.*

Best WER: %WER 27.05 [2046 / 7565, 205 ins, 292 del, 1549 sub]

For the following experiments 7-11: Trained a GMM based tri-phone acoustic model on the complete corpus (708 sentences) of n-1 speakers and tested it on the complete corpus of the remaining 1 speaker, so 5 different models (leaving out SP1-SP5). Used LM2.gz while decoding.

Experiment No. 7

Experiment Type: Multi Speaker

Train/Test Details: SP5 21100197 left out for test, the rest used for training (all 708)

Best WER: %WER 23.83 [2407 / 10101, 224 ins, 349 del, 1834 sub]

Experiment No. 8

Experiment Type: Multi Speaker

Train/Test Details: SP4 21100297 left out for test, the rest used for training (all 708)

Best WER: %WER 39.42 [3982 / 10101, 597 ins, 532 del, 2853 sub]

Experiment No. 9

Experiment Type: Multi Speaker

Train/Test Details: SP3 21100170 left out for test, the rest used for training (all 708)

Best WER: %WER 35.42 [3578 / 10101, 376 ins, 930 del, 2272 sub]

Experiment No. 10

Experiment Type: Multi Speaker

Train/Test Details: SP2 21100320 left out for test, the rest used for training (all 708)

Best WER: %WER 21.98 [2220 / 10101, 253 ins, 259 del, 1708 sub]

Experiment No. 11

Experiment Type: Multi Speaker

Train/Test Details: SP1 21100130 left out for test, the rest used for training (all 708)

Best WER: %WER 12.46 [1259 / 10101, 143 ins, 204 del, 912 sub]