**Digital Speech Processing HW#2**

**Experiment: How Changes Effect Performance**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Gaussian Mixtures | | States | | Iterations | |
| # | Accur. | # | Accur. | # | Accur. |
| 2 | 74.34 | 5 | 74.34 | 3 | 74.34 |
| 5 | 76.81 | 8 | 89.64 | 5 | 75.83 |
| 8 | 76.81 | 10 | 93.67 | 8 | 76.93 |
| 12 | 80.21 | 12 | 95.22 | 10 | 76.93 |
| 15 | 77.16 | 15 | 95.91 | 12 | 77.04 |
|  |  | 18 | 95.11 | 15 | 77.16 |
|  |  |  |  | 18 | 76.47 |

**Combining the Best Solutions of Each Parameter**

**# of Gaussian mixtures: 12**

**# of states: 15**

**# of iterations: 15**

* **Result Accuracy: 96.66**