



**MELANIE**  
**Speaker Identification**  
GMM

## MELANIE – Speaker Identification, GMM

### Functionality

Speaker identification determines the probability of a set of speakers in speech signals.

The algorithm is especially useful when searching for a certain speaker in mass audio data.



### Training of Models

**Goal** Training is performed in order to optimise the models on the respective speaker.

**Training Data** The training data must be labeled according to the prevailing speaker. If possible, the speaker data should be obtained from different channels and languages. A minimum of two minutes speech is required for each speaker.

### Technical Data

**OperatingSystem** Available on Windows XP and Linux

**Processing Time**

- On a P4; 3GHz, 1GB RAM computer
- 1/8 of real time; i.e. a signal of 8 minutes length is processed in one minute

**Recognition Rate** The recognition rate depends on the number of speakers, on the similarities of the speakers among each other and on the speech quality.

### Products

<i>Mel-Pr-GMM-site</i>	Production environment for MELANIE GMM (site license)
<i>Mel-Pr-GMM-PC</i>	Production environment for MELANIE GMM (PC license)
<i>Mel-Tr-GMM</i>	Training environment for MELANIE GMM



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or would like to discuss a specific requirement or project, please contact us at:

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