Lecture "Automatic Speech Recognition"
WS 2010/11

Type	Schedule / Room	Start	Instructor
V4/3	(für Diplom, Master SSE und Master MI/ für Bachelor)		Dr.rer.nat. R. Schlüter, Prof. Dr.–Ing. H. Ney
	Di 10^{00}–11^{30} 6124	26.10.	First lecture
	Mo 10^{00}–11^{30} AH 6	28.10	
	Do 11^{45}–13^{15} AH 6		
Ü2	Fr 09^{00}–10^{30} 6124	29.10.	Nußbaum-Thom

Content:

The aim of automatic speech recognition is to extract the spoken word sequence from the acoustic signal. An automatic speech recognition system consists typically of four parts:

- the signal analysis extracts time-dependent features from the acoustic signal
- the acoustic model establishes a link between features and phonemes the language model covers syntactic and semantic constraints of the language
- the search process determines the word sequence that fits best to the features taking the acoustic and language model into account.

The lecture gives an introduction into the individual components of an automatic speech recognizer.

Requirements:

knowledge of probability theory / statistics

References:

- Course notes of our group for this lecture (old notes in German, new viewgraphs in English)
- L. Rabiner, B. H. Juang: "Fundamentals of Speech Recognition", Prentice Hall, Englewood Cliffs, New Jersey, 1993.
- F. Jelinek: "Statistical Methods for Speech Recognition", MIT Press, Cambridge, MA, 1998.

Subsequent courses planned:

In addition, our group offers the lectures "Statistical Methods in Natural Language Processing" and "Pattern Recognition and Neural Networks".

Others:

The lecture will be given in English.

For more information, please contact:

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