# Statistical Methods in Natural Language Processing SS 2009

Type	Schedule / Room	Start	Instructor
V4	Mo 10 <sup>00</sup> -11 <sup>30</sup> AH VI	20.04.	Prof. DrIng. H. Ney
	Mi 10 <sup>00</sup> -11 <sup>30</sup> AH V	22.04	
Ü2	Mo 14 <sup>00</sup> -15 <sup>30</sup> AH III	27.04.	Ney, Vilar, N.N.

### Content:

Automatic methods for natural language processing play an important role in any humanmachine interaction applications and other tasks in artificial intelligence. This course deals with statistical methods that have been found most successful for many tasks in natural language processing. The course covers the following topics:

- text and document classification including information retrieval
- information extraction including tagging and semantic annotation
- syntactic analysis and parsing
- language modeling
- machine translation of natural language
  - alignment and lexicon models
  - training methods
  - generation process
  - grammar-based approaches

## **Assignment:**

Applied Computer Science or Field of Specialization

## Requirements:

• Vordiplom

#### References:

• C. D. Manning, H. Schütze: "Foundations of Statistical Natural Language Processing", MIT Press, Cambridge, MA, 1999.

## Others:

The Lehrstuhl also offers a seminar and a practical course. During both activities topics from speech and image object recognition are treated.

Enquiries to:

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