Introduction to Computational Linguistics

Frank Richter

fr@sfs.uni-tuebingen.de.

Seminar für Sprachwissenschaft

Eberhard Karls Universität Tübingen

Germany

Course Goals

- First (largely non-technical) introduction to the field of computational linguistics and its history

- Survey of natural language processing applications

- In-depth look at machine translation as a means to illustrate the major tasks for natural language processing

- Presentation of tools and resources needed for natural language processing applications

The Name of the Field

- Computational Linguistics

- Natural Language Processing

- Human Language Technology

- Language Engineering

The History of the Field

- Not surprisingly, the history of Computational Linguistics is closely connected to the development of the digital computer.

- The theoretical foundations of Computational Linguistics are in the field of mathematical linguistics and formal language theory and in the field of information theory.

- The first application of Computational Linguistics was in the area of machine translation. Therefore, the first professional organization was called *Association for Machine Translation and Computational Linguistics*.