

Natural Language Processing

- Linguistics and Levels of Language
- Disambiguation Tasks
- Part of Speech Tagging

Pure Word Extraction

- Concepts vs. Words
- Context and Meaning
- Grammatical Tagging of Concepts
- Grammar-Based Extraction
- Concept Extraction Basics
- Grammatical Concepts
- Use of Concept Extraction for Knowledge Management

Rule-Based Concept Extraction

- Concept Extraction vs. Classification
- Knowledge Sources as Rule Sets
- Uses of Rule Based Concept Extraction for Knowledge

Rule-Based Classification

(When You Have a Scheme to Work With)

- Supervised vs. Unsupervised Methods
- Differentiation of Processes and Scheme Development
- Distinction between Classification and Indexing
- Subject Classification
- Geographical Classification
- Sentiment Classification
- Security Level and Risk Classification

Clustering aka Dynamic Categorization

- Statistical Methods Used in Clustering
- Concept of Similarity
- Selecting Variables
- Validation of Clusters

Automated Summarization

- Modeling the Human Process
- Professional Rules for Abstracting
- Frequency of Concepts Extraction
- Cue Phrases, Important or Exclusion Phrases
- Differentiation of Text Summarization and Text Generation

Text Generation

- Human Authoring Processes • Document Planning
- Content and Structures
- Text micro planing

Sentiment Analysis

- Machine Learning

Modeling a Semantic Solution

- Recommender Systems
- Machine Learning