CAP 6640 Natural Language Processing

Credits: 3 credits

Textbook, title, author, and year: Hand-outs and notes

Reference materials: Speech and Language Processing (2nd edition)
Authors: Dan Jurafsky and James H. Martin

Specific course information

Catalog description: This course provides an introduction to the field of Natural Language Processing. It includes relevant background material in Linguistics, Mathematics, Probabilities, and Computer Science. Some of the topics covered in the class are Text Similarity, Part of Speech Tagging, Parsing, Semantics, Question Answering, Sentiment Analysis, and Text Summarization.

Prerequisites: COP3530 Data Structures and Algorithm Analysis or permission of the instructor

Specific goals for the course: This course will provide students with both theory and applications of Natural Language Processing (NLP). Students will gain basic to advanced knowledge and hands-on experience.

Brief list of topics to be covered:

Topics
Introduction
NLP Tasks and Text Similarity
Syntax and Parsing
Language Modeling and Word Sense Disambiguation
Part of Speech Tagging and Information Extraction
Question Answering
Text Summarization
Sentiment Analysis and Semantics
Machine Translation, and Generation