COURSE DETAIL

NATURAL LANGUAGE PROCESSING

Country
Denmark

Host Institution
University of Copenhagen

Program(s)
University of Copenhagen

UCEAP Course Level
Upper Division

UCEAP Subject Area(s)
Computer Science

UCEAP Course Number
134

UCEAP Course Suffix

UCEAP Official Title
NATURAL LANGUAGE PROCESSING

UCEAP Transcript Title
NATURAL LANG PROCES

UCEAP Quarter Units
6.00

UCEAP Semester Units
4.00

Course Description

This course introduces the fundamentals of natural language processing (NLP), i.e. computational models of language and their applications to text. This course combines machine learning (ML), including fundamental formalisms and algorithms, with a strong hands-on experience. The course covers topics including the NLP tasks of language modeling, text classification, semantics, information extraction, parsing, pragmatics, machine translation, summarization, and answering questions. Methods covered include text classification, structured prediction, representation and deep learning, conditional random fields, and beam search. Students learn efficient implementations and the relationship between NLP tasks. This course also explores the themes of discriminative and generative learning, and various ways of obtaining supervision for training statistical NLP models. Students apply the skills and concepts learned in this course to other fields including data science, political science research, and gene sequencing.

Language(s) of Instruction

English

Host Institution Course Number

NDAK18000U

Host Institution Course Title

NATURAL LANGUAGE PROCESSING (NLP)

Host Institution Course Details

Host Institution Campus

Science

Host Institution Faculty

Host Institution Degree

Host Institution Department

Computer Science

Course Last Reviewed

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