COURSE DETAIL

LARGE-SCALE DATA ANALYSIS
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 141
UCEAP Course Suffix
UCEAP Official Title LARGE-SCALE DATA ANALYSIS
UCEAP Transcript Title LARGE-SCALE DATA
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description
This course focuses on educating future data analysts. In comparison to other courses dealing with machine learning or data analysis, the focus of this course is on the peculiarities of processing large amounts of data - that is, on Big Data. The course is relevant for students from the studies of Computer Science, Cognition and IT, Bioinformatics, Physics, Statistics, and other areas of quantitative studies. The course covers a selection of the following list: fundamentals of data mining; online and large-scale machine learning; programming paradigms for large-scale data analysis; mining of streaming data; data analysis on (massively-)parallel platforms. Students obtain knowledge on: the general principles of data mining; the theoretical concepts underlying large-scale data analysis; common pitfalls in large-scale data analysis; how to apply efficient algorithms for analyzing large-scale data sets; using programming paradigms for large-scale data analysis; using software tools for large-scale data analysis; identifying and handling common pitfalls in data analysis. Prerequisites: Machine Learning or a similar course; knowledge of basic calculus and statistics is required. Participants should also have knowledge of basic programming and programming languages (in particular Python) or should be willing to spend extra study time to get familiar with the required programming skills.

Language(s) of Instruction
English

Host Institution Course Number
NDAK15018U

Host Institution Course Title
LARGE-SCALE DATA ANALYSIS (LSDA)

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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