COURSE DETAIL

ALGORITHMS FOR ANALYZING BIOLOGICAL SEQUENCES
Country Taiwan
Host Institution National Taiwan University
Program(s) National Taiwan University
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Computer Science
UCEAP Course Number 128
UCEAP Course Suffix
UCEAP Official Title ALGORITHMS FOR ANALYZING BIOLOGICAL SEQUENCES
UCEAP Transcript Title ALGORITHMS FOR BIOL
UCEAP Quarter Units 4.50
UCEAP Semester Units 3.00

Course Description

This course introduces biological sequence analysis methods. The course provides familiarity with the vast amounts of biomedical and genomic data and online tools. The first part of the course explores basic algorithmic strategies, sequence alignment, chaining algorithms, and genomics. If time allows, Hidden Markov models (the Viterbi algorithm) are discussed. The second part covers sequence assembly, max-sum/max-density segments, data analysis, and more techniques used in genomics analysis.

Language(s) of Instruction
English

Host Institution Course Number
CSIE5028

Host Institution Course Title
ALGORITHMS FOR ANALYZING BIOLOGICAL SEQUENCES

Host Institution Course Details
https://nol.ntu.edu.tw/nol/coursesearch/print_table.php?course_id=922%20U0290&c...

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Computer Science and Information Engineering

Course Last Reviewed
2022-2023

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