COURSE DETAIL

ONLINE AND REINFORCEMENT LEARNING
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 107
UCEAP Course Suffix
UCEAP Official Title ONLINE AND REINFORCEMENT LEARNING
UCEAP Transcript Title REINFORCEMENT LEARN
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description

This course covers online and reinforcement learning, concepts that break out of the static realm and move into the perpetual cycle of receiving new information, analyzing it, and executing actions based on the updated estimation of reality. This course considers the agents (computer programs, robots, living beings) that learn based on interactions with real or simulated environments: repeated investment in the stock market, spam filtering, online advertising, online routing, medical treatments, games, and robotics. The course also situates online and reinforcement learning to model a much richer range of problems, such as limited and delayed feedback; and even adversarial problems, where the environment deliberately acts against the algorithm (chess, spam filtering). Mathematical tools for developing and analyzing algorithms for these problems are also studied.

Language(s) of Instruction
English

Host Institution Course Number
NDAK21003U

Host Institution Course Title
ONLINE AND REINFORCEMENT LEARNING (OREL)

Host Institution Course Details
https://kurser.ku.dk/course/ndak21003u/2021-2022

Host Institution Campus

Host Institution Faculty
Faculty of Science

Host Institution Degree
Master

Host Institution Department
Department of Computer Science

Course Last Reviewed
2021-2022

Print