COURSE DETAIL

ARTIFICIAL INTELLIGENCE
Country United Kingdom - England
Host Institution London School of Economics
Program(s) London School of Economics
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Statistics
UCEAP Course Number 123
UCEAP Course Suffix
UCEAP Official Title ARTIFICIAL INTELLIGENCE
UCEAP Transcript Title ARTIFICIAL INTELLIG
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description

The course introduces students to basic principles of artificial intelligence (AI) systems. By AI, we refer to machines (or computers) that mimic cognitive functions that humans associate with the human mind, such as learning and problem solving. The course takes a practical approach, explaining the main principles and methods used in the design of AI systems. The course provides an introduction to main principles of deep learning, covering topics of neural nets as universal approximators, design of neural network architectures, backpropagation and optimization methods for training neural networks, and some special deep neural network architectures commonly used for solving AI tasks such as image classification, sequence modelling, natural language processing and generative models. If time allows, this course also provides an introduction to reinforcement learning problem formulation. Students gain practical knowledge to learn and evaluate deep learning and reinforcement learning algorithms (if time allows) using Python and open-source software libraries.

Language(s) of Instruction
English

Host Institution Course Number
ST311

Host Institution Course Title
ARTIFICIAL INTELLIGENCE

Host Institution Course Details
https://www.lse.ac.uk/resources/calendar/courseGuides/ST/2022_ST311.htm

Host Institution Campus
London School of Economics

Host Institution Faculty

Host Institution Degree

Host Institution Department
Statistics

Course Last Reviewed
2022-2023

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