COURSE DETAIL

2.00

INTRODUCTION TO ARTIFICIAL INTELLIGENCE Country Japan **Host Institution Keio University** Program(s) Keio University **UCEAP Course Level Upper Division UCEAP Subject Area(s) Computer Science UCEAP Course Number** 120 **UCEAP Course Suffix UCEAP Official Title** INTRODUCTION TO ARTIFICIAL INTELLIGENCE **UCEAP Transcript Title** INTRO TO AI **UCEAP Quarter Units** 3.00 **UCEAP Semester Units**

Course Description

This is an introductory course on modern Artificial Intelligence designed for Keio University. It focuses predominantly on theory and fundamental concepts, with implementation of basic techniques in Python. Depending on the level of the students and time constraints, it may also cover more practical engineering topics using modern practices, as well as some of the most influential recent advancements based on a selection of research papers. Additionally, the course also covers some topics in more depth based on the interests of the instructor. One of those topics is Natural Language Processing (NLP) in the era of Deep Learning, as well as advanced methods in representation learning.

This course focuses on Deep Neural Information Processing Systems. As a rapidly developing field, the course centers on most important trends and core ideas, as it is impossible to cover all recent developments in a single course. It follows historical trends in AI with a focus on neural networks, seeing how the current ideas emerged out of decades of research in the field. Then, the course discusses current neural architectures and algorithms, while introducing modern perspectives. After completing this course, students are expected to have an appreciation and understanding of neural AI systems and anticipate future developments in research and applications of AI (especially Deep Learning).

Language(s) of Instruction

English

Host Institution Course Number

N/A

Host Institution Course Title

INTRODUCTION TO ARTIFICIAL INTELLIGENCE

Host Institution Campus

Keio University, Mita Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Economics

<u>Print</u>