COURSE DETAIL

MATHEMATICS FOR MACHINE LEARNING

Country

United Kingdom - England

Host Institution

Imperial College London

Program(s)

Imperial College London

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mathematics Computer Science

UCEAP Course Number

183

UCEAP Course Suffix

UCEAP Official Title

MATHEMATICS FOR MACHINE LEARNING

UCEAP Transcript Title

MATH MACHINE LEARN

UCEAP Quarter Units

5.00

UCEAP Semester Units

3.30

Course Description

In this class you will have the opportunity to be provided with the necessary mathematical background and skills in order to understand, design and implement modern statistical machine learning methodologies, as well as inference mechanisms. You will be provided with examples regarding the use of mathematical tools for the design of foundational machine learning and inference methodologies, such as Principal Component Analysis (PCA), Bayesian Linear Regression and Support Vector Machines Learning outcomes Upon successful completion of this module you will be able to implement foundational machine learning algorithms from scratch. Students will be able to apply appropriate mathematical techniques in a machine learning setting and critically assess the quality of machine learning models, as well as evaluate connections between different machine learning algorithms.

Language(s) of Instruction

English

Host Institution Course Number

CO496

Host Institution Course Title

MATHEMATICS FOR MACHINE LEARNING

Host Institution Campus

Imperial

Host Institution Faculty

Host Institution Degree

Host Institution Department

Computing

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