Module Overview

ST1511 (AIML) AI & MACHINE LEARNING

Module Aims

AIML aims to provide students with hands-on experience in building machine learning systems using advanced algorithms such as kernel methods and neural networks.

Module Topics

TERM I

Section 1

Topic 1 Introduction to Artificial Intelligence (AI)

Topic 2 Applying Machine Learning (ML) using Cloud tools

Topic 3 Python ML

Section 2

Topic 4 Python Supervised ML (Classification & Regression)

Topic 5 Model Improvement

TERM II

Section 3

Topic 6 Python Unsupervised ML

Topic 7 Time Series

Section 4

Topic 8 Implementing Bots

Assessment

The assessment for this module has the following components:

1. CA1: Assignment 1	40%
2. CA2: Assignment 2	40%
3. CA3: General Performance	20%
Total	100%

References

- 1. Aurélien Géron, 2017. Hands-On Machine Learning with Scikit-Learn and TensorFlow. O'Reilly.
- 2. Goodfellow, I., Bengio, Y. and Courville, A., 2016. Deep learning. MIT Press.
- 3. Müller, A.C., Guido, S., 2017. Introduction to machine learning with Python a guide for data scientists. OReilly, Beijing.
- 4. Raschka, S., 2017. Python machine learning Second Edition. Packt Publishing, Birmingham.
- 5. Shevat, A., 2017. Designing Bots: Creating Conversational Experiences. O'Reilly.