Introduction to Machine Learning

2 hour Workshop 17 May 2018 Starts at 10:00

Hosts

- Marisa Llorens Salvador, Dublin Institute of Technology
- Eileen Mageean, Dublin Institute of Technology

Aim

This workshop presents a comprehensive introduction to machine learning concepts such as clustering and classification. Topics include basic programming skills as well as in-depth coverage of the most common python structures and methods.

The workshop is aimed at technologists, with some experience using the Python programming language, who want to explore the possibilities of machine learning algorithms.

The main aim of this module is to introduce the principles of machine learning. Case studies and practical examples will be used to illustrate the use of clustering and classification algorithms to solve practical problems.

Outline of the workshop

An outline of the workshop is as follows:

- Introduction to the Python data science packages (scikitlearn, pandas, numpy)
- Examples of clustering techniques
- The classification task: a supervised learning approach
- Lazy Learning: K-NN
- Eager Learning: SVM
- Performance measures