

Machine Learning with Python *

Machine learning has become an essential component in many applications and projects that involve data. With the power of Python and the scikit-learn package, this exciting field is no longer exclusive to large companies with extensive research teams. If you use Python, even as a beginner, machine learning applications are limited only by your imagination.

During this workshop, we will take a hands-on approach to learning about machine learning algorithms. Topics include: regression, classification, outlier detection, dimensionality reduction, and clustering. During the two days, we'll explore various algorithms such as linear regression, logistic regression, decision trees, neural networks, and many more.

By the end of this workshop you'll confidently select and employ machine learning algorithms using Python and scikit-learn. You'll have gained a new understanding of the inner workings of machine learning algorithms and know how to leverage them to produce valuable results and insights.

Content

- The fundamental concepts behind machine learning
- An overview of various machine learning algorithms
- How to use JupyterLab, Python, and the scikit-learn package to perform machine learning
- How to apply supervised machine learning, such as regression and classification
- How to apply unsupervised machine learning, such as dimensionality reduction, clustering, and outlier detection

*This workshop cannot be credited as a qualification measure at the Faculty of Mechanical Engineering. Nevertheless, participation is open to all doctoral candidates.

