MACHINE LEARNING AND OPTIMIZATION FOR TESTING

EXE1: Introduction – data science and Python

11.10.2024

DI Dr Branka Stojanovic

ORGANISATION

Unit	Date	Type/Scope	Content
1	04.10.2024	2 LE	Introduction – AI/ML and testing
2	11.10.2024	2 EXE	Introduction – data science and Python
3	18.10.2024	2 LE	Machine learning, testing and data preparation
4	18.10.2024	2 EXE	Data preparation and Python; Homework assignments
5	25.10.2024	2 LE	Supervised Machine Learning
6	25.10.2024	2 EXE	Supervised Machine Learning
7	22.11.2024	2 LE	Unsupervised Machine Learning
8	22.11.2024	2 EXE	Unsupervised Machine Learning
9	29.11.2024	2 LE	Neural Networks and Deep Learning
10	29.11.2024	2 EXE	Neural Networks and Deep Learning
11	06.12.2024	2 LE	Final project introduction and assignments
12	13.12.2024	2 EXE	Hands-on - Final project consultation; Homework discussion
13	10.01.2025	2 LE	Final project tutorial and results presentations and discussion
14	10.01.2025	2 EXE	Final project results demonstrations
15	17.01.2025	2 LE	Recap and Q&A
16	?	1 EXM	Exam

Introduction to Python

See separate files (Moodle)

- MLOT2024-EXE1_20241011_Intro_to_Python.zip
  - MLOT2024-EXE1_20241011_Intro_to_Python.ipynb
    - Open with Jupyter Notebook, included in Anaconda
    - Notebook is to be executed during the exercise appointment
    - **Do not miss 4 TODO tasks inside** (not graded, to be discussed during the session)**!**
  - MLOT_env.yml
    - The environment with useful libraries already included
    - To be included in Anaconda and used during the exercises and the exam
  - Useful docs
    - Numpy_Cheat_Sheet.pdf
    - Python_for_Data_Science_Cheat_Sheet.pdf