Timetable Workshop "**Machine Learning and Prediction Modelling**" 2025

**Day 1** (14 Oct):

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| **Time** | **Topic** |
| 09:00 – 09:20 | Welcome and short intro to ML |
| 09:20 – 10:00 | PCA |
| 10:00 – 10:45 | PCA (Exercise) |
| 10:45 – 11:00 | Break |
| 11:00 – 11:45 | K-Means |
| 11:45 – 13:00 | Lunch |
| 13:00 – 13:30 | K-Means (Exercise) |
| 13:30 – 14:00 | KNN |
| 14:00 – 14:30 | KNN (Exercise) |
| 14:30 – 14:45 | Break |
| 14:45 – 15:45 | Crossvalidation |

**Day 2** (20 Oct):

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| **Time** | **Topic** |
| 09:00 – 09:45 | Decision trees |
| 09:45 – 10:30 | Decision trees (Exercise) |
| 10:30 – 10:45 | Break |
| 10:45 – 11:45 | Ensemble methods (+ Interpretability) |
| 11:45 – 13:00 | Lunch |
| 13:00 – 13:45 | Ensemble methods (Exercise) |
| 13:45 – 14:45 | Neural Networks |
| 14:45 – 15:45 | Neural Networks (Exercise) |

**Day 3** (21 Oct):

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| **Time** | **Topic** |
| 09:15 – 09:45 | Penalized regression |
| 09:45 – 10:30 | Penalized regression (Exercise) |
| 10:30 – 10:45 | Break |
| 10:45 – 11:15 | Develop and validate a prediction model |
| 11:15 – 12:00 | Develop and validate a prediction model (Exercise) |
| 12:00 – 13:00 | Lunch |
| 13:00 – 13:15 | Building a clinical score |
| 13:15 – 13:45 | Building a clinical score (Exercise) |
| 13:45 – 14:00 | Support vector machine (SVM) |
| 14:00 – 14:15 | Break |
| 14:15 – 14:45 | SVM (Exercise) |
| 14:45– 15:45 | Exercise, Q&A, own case |