

Unit 0

Projects

Content

For each project cover the following aspects:

- Select a data set for a regression / classification task.
- Describe the application context.
- Perform an exploratory analysis.
- Describe pre-processing and any necessary variable selection steps prior to analysis.
- Fit a suitable predictive model using at least 3 different methods covered in class including hyperparameter tuning.
- Discuss model selection and model assessment.
- Provide insights on the final model and its performance.

Organisation

- Presentations take place:
 - 1677: 2025-11-18 08:00-11:00
 - 2093: 2025-11-18 15:00-18:00
 - 2094: 2025-11-20 08:00-11:00
 - 2095: 2025-11-18 12:00-15:00
- Within each course, groups consisting of 2 students are formed (in case of an odd number of students: one group with 3 students).
- Each group has a time slot of 20 minutes: 15 minutes presentation plus 5 minutes discussion / questions.
- Slides in PDF format need to be uploaded the day before the presentation to WU Canvas.
- Slides need to be detailed enough to follow the analysis, e.g., include backup slides with additional information.

Grading criteria

- Motivation of data set choice and selection of methods (20%).
- Correctness of results (30%).
- Structure, in particular succinctness and clarity of the presentation (30%).
- Professional and informed reaction to feedback, discussion, and critical remarks (20%).