Case Studies 2022L
Lab + Project

Feb 24, 2022

Type of Classes

Lab 💻 **+ Project** 🗂️ + Lecture 👩🏻‍🏫

Lab:

- explainable machine learning methods

- homework - 48 points (individual) - can be used in the project.

Project:

- final report - 32 points (assessed by the group leader)

- recorded presentation - 16 points (by all members)

Project 🗂

- Work on real issues, specific problems to solve by human-oriented perspective.

- Work in groups of 3 (II + III years).

- Problems (datasets) will be announced (?)

Schedule 📅

Week	Date	Topic
1	Feb 24	Introduction to the WB
2	Mar 3	ML Philosophy and XAI
3	Mar 10	Break-Down method and Shapley-values
4	Mar 17	*Overview of Homework I*
5	Mar 24	LIME method
6	Mar 31	*Overview of Homework II*
7	Apr 7	Ceteris Paribus profiles
8	Apr 14	*Overview of Homework III*
9	Apr 21	Permutational variable importance
10	Apr 28	*Overview of Homework IV*
11	May 5	Partial dependence profiles and Accumulated local effects
12	May 19	Global explanations
13	May 26	*Overview of Homework V*
	May 29	**Presentation submission deadline**
14	Jun 2	Model exploration
15	Jun 9	Summary of projects / consultation
	Jun 9	**Report submission deadline**

Theme of the project

- AutoEDA tools

- Machine learning models

- Reading the problem-relevant literature

- Local explanations

- Global explanations

- Evaluation results

Outputs

- The end result of the project will be a report which will be a description of the problem and its solution ✏️

- There will be project presentations (best 2! 📈) during the lecture.

Q&A 🤔

- Do we combine laboratory and project classes as one block (< 90 min) or separately (45 + 45 min)?

- R / Python?

- …

Please feel free to send e-mail about your questions!

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