

Selected parts of data mining – a course intro

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<http://cw.felk.cvut.cz/wiki/courses/xp36vpd/start>

The course content

- Modern and recent data mining methods,
- modern and recent machine learning methods
 - a sister ML course planned, currently joined with this DM course,
- Related bachelor and master courses (not direct prerequisites)
 - Pattern recognition,
 - Symbolic/statistical machine learning,
 - Statistical data analysis,
- Resources
 - books: Rajaraman, A., Leskovec, J., Ullman, J. D.: Mining of Massive Datasets, Cambridge University Press, 2011.
 - research papers: see examples,
 - recent issues in relevant journals: Data Mining and Knowledge Discovery, Machine Learning,
 - recent tutorials, major ML/DM conferences: KDD, Discovery Science, ICML, ECML, NIPS/NeurIPS.

Expectations

- Reading class
 - no "labs", presentations and discussions only,
 - much effort spent on home work,
- each participant will prepare and give two presentations
 - around 60min each + discussion,
 - the first one a broader review,
 - the second one can touch/extend your current research if DM/ML related,
- you are expected to regularly attend the class
 - you are supposed to read a review paper recommended for the topic before presentations of the other students,
 - and prepare a few questions for discussion.
- the course will be concluded with an exam
 - rather a formal one,
 - still, every student should review the presented topics before the exam.

The main issues for the first class

- Introduce each other
 - name, supervisor, dissertation topic, research interests,
- The initial discussion about the first assignments
 - the topics should be settled at least two weeks in advance ...
 - ... and publicly agreed by the audience.