The Elements of Machine Learning

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Your Responsible Adults

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# Tentative Schedule

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When

Lectures
- Thu 14:15-16:45, live on Zoom and YouTube
- last lecture: Feb 4, 2021

Exams
- oral or written
  - decision to be made in three weeks
  - if oral, may be done in either English or German
  - if written, will be in English
- currently planned for Wed 24.02.2021 – Fri 26.02.2021
Prerequisites

- Basic programming skills
- Basic mathematics
  - at least at Bachelor level (CompSci, BioInf, or equivalent)
- Linear algebra
  - if not, read *Introduction to Linear Algebra* by Strang
- Basic knowledge in statistics
  - if not, read *All of Statistics* by Wasserman
Assignment Zero

Assignment Zero is already available online
- ungraded self-assessment
- still time left to prepare

You are strongly recommended to take it
Tutorial Zero

**Tutorial Zero** is already available online
- short introduction to R

You are **strongly** recommended to watch it
Course Material

An Introduction to Statistical Learning
Gareth James, Daniela Witten, Trevor Hastie and Robert Tibshirani
(2013, corrected fourth printing 2014, PDF)

The Elements of Statistical Learning
Trevor Hastie, Robert Tibshirani and Jerome Friedman
(second edition, 2009, PDF)
Basic and Advanced

EML is special

- **Basic Lecture** in all updated BSc CS programmes
- **Advanced Lecture** for all students in other programmes

You can **only once** receive credits for EML

- either as Basic Lecture **or** as Advanced Lecture
- and, only if you did not complete an equivalent course (e.g. ESL)
Credits

6 credit points based on

- at least 50% of points for theory assignments
- at least 50% of points for practical assignments
- final exam
Assignments

One sheet per two weeks
- deadlines 14:00 before lecture
- may do individually or in teams of two

First sheet online per 5\textsuperscript{th} of November
- password will be send per email
- deadline \textbf{Thu 19.11.2020 14:00}
Plagiarism

We do not condone plagiarism

- plagiarism between teams or from other sources is not tolerated
- formal policy will be posted on website
- we warn once, **second time you’re out** and reported to exam office
Tutorials

Tutorials
- two groups: Mon 12-14 and Tue 12-14
- register by November 5th at https://cms.cispa.saarland/eml/

Week $n$
- hand in assignment

Week $n + 1$
- tutors lead discussion on solutions

Week $n + 2$
- tutors assist with current sheet, hand out grades of previous one