



Politechnika
Wrocławska

Probabilistic Machine Learning

Laboratory – intro

28th February 2020 & 2nd March 2020



HR EXCELLENCE IN RESEARCH

Staff

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Office hours: **Monday, 15:30–16:30, room 441, building A-1.**
Please send an email beforehand.

Plan

Lab no.	Name	Friday group	Monday groups
0	Lab & Python intro	28.02	02.03
1	PyTorch	06.03	09.03
2	Pyro	13.03	16.03
3	Estimation with data	20.03	23.03
4	Bayesian Linear models	27.03	30.03
5	Gaussian Process & Mixture Models	03.04	06.04
6	Graphical models	17.04	20.04
7	Detailed Graphical models	24.04	27.04
8	Project 1 - report	08.05	04.05
9	Bayesian Neural Networks	15.05	11.05
10	Variational Autoencoder	22.05	18.05
11	Application of graphical models	29.05	25.05
12	Conformal & Probabilistic Prediction Framework	05.06	01.06
13	Project 2 - report	12.06	08.06
14	Summary	17.06	15.06

Laboratory outline

- ▶ 10-20 minutes - introduction to current topic
- ▶ 5-10 minutes - homework discussion
- ▶ till end of lab - working on tasks + homework checking
- ▶ last 10 minutes - checking if tasks done

Grading

- ▶ Every laboratory is graded separately
- ▶ Every laboratory has the same number of points
- ▶ Grade:
 - ▶ 50% projects (2 x 30 points)
 - ▶ 40% homeworks (12 x 4 points)
 - ▶ 10% activity (12x 1 points)
 - ▶ total 120 points
- ▶ Every laboratory must get $> 50\%$
- ▶ If you get 5.0 mark and at least one project was graded at 5.5, you can get **grade 5.5** for whole course.

Points range	Grade
$< 50\%$	2
$[50\%, 60\%)$	3
$[60\%, 70\%)$	3.5
$[70\%, 80\%)$	4
$[80\%, 90\%)$	4.5
$[90\%, 100\%]$	5
$> 100\%$	5.5

Projects

- ▶ Prepared in groups of 2 students
- ▶ Each project for 30 points
- ▶ Precise information about each project will be published shortly
- ▶ Projects about:
 - ▶ using learnt tool/techniques in solving more complex problems
 - ▶ implementation of scientific paper (in area of probabilistic ML)

Delayed submissions

- ▶ max. 2 lists can be submitted delayed
- ▶ 90% of points for lists submitted in the next week
- ▶ 80% of points for lists submitted in 2 weeks
- ▶ 0% of points for list after 2 weeks

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