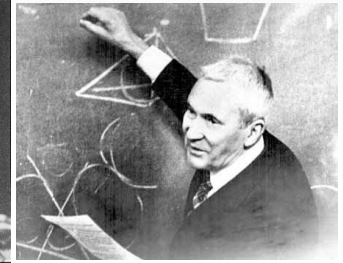
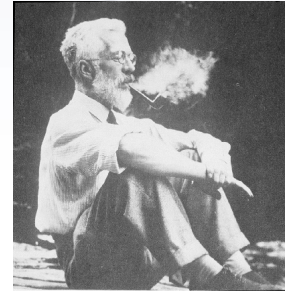
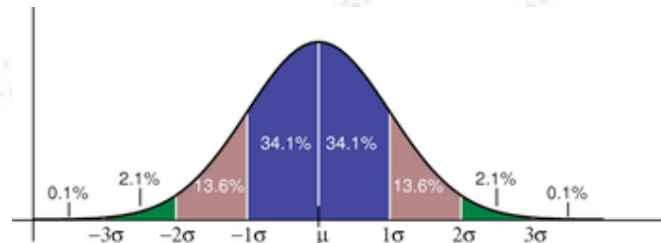


# Applied ML

## Final Project Presentations & Schedule



Troels C. Petersen (NBI)



*"Statistics is merely a quantisation of common sense - Machine Learning is a sharpening of it!"*

# Your presentations

**Each presentation is allotted  $8 + 2N_{\text{group}}$  minutes, sharp!**

In order to use this time best, please do one or more rehearsals, and also use these for “sharpening” your slides. You should try to share, who gives the presentation, and the full group should be present for questions.

Make sure that you introduce the problem and the associated data. Also describe your process, discuss your choice of methods, and recount your problems/optimisation/CPU or GPU-usage/etc. And then state your results!

The final projects will be evaluated based on the following criteria:

- Complexity of problem and depth of solution (incl. appendix)
- Choice of methods and arguments behind
- ML performance and own evaluation of it
- Clarity of presentation and how much the class will learn from presentation
- Implementation, technical details, optimisation, etc. (your appendix)
- Ability to evaluate ML usage (your evaluations of other presentations)

# Your presentations

**Each presentation is allotted  $8 + 2N_{\text{group}}$  minutes, sharp!**

Your **slides, statement, and zipped code** should be uploaded to [eksamen.ku.dk](https://eksamen.ku.dk) by Tuesday the 9th of June 20:00, and I will then put your slides on the course webpage, for all to see (naming: **“FinalProject\_GroupMembersFirstNames.pdf”**). It is OK, if you do (minor) updates in your presentation, for the actual exam. Please send me your latest version to me in PDF before presenting.

Remember to divide your slides into two parts:

- Presentation, which is what you will present during you presentation time.
- Appendix, which documents your work.

**I will start 9:00** with a short introduction. There will also be a Zoom link for external participation. We will **not** record your presentations, but base our evaluation on your presentation and your slides **including appendix**.

You will all be asked to evaluate each others projects, as a part of the course.

*These evaluations will **not** be used for our grading of the projects.*

# Your presentations

A few things to consider to make your presentation clear (read: understandable) to the audience could be:

- Make sure you present the **context, motivation, and goal** of the project.
- **Present the data in detail:** Amount, features, relations, labels, etc.
- Possibly give an **overview of methods** used, for audience to have an outline.
- **Recount the challenges** (for all to learn!) and how you dealt with them.
- **Show/compare performance clearly**, and discuss from these.
- Summarise your project in a **few clear sentences and numbers**.
- Perhaps tell us, what you would have done with more time, data, GPU, etc.

Regarding attendance and your evaluation of the other project:

We strongly urge you to attend as much as you can (for your own learning).

However, all projects will be posted ahead of the exam on the course webpage:

*Thus, you can evaluate all the projects from anywhere at anytime until Thursday night.*

The link to use for your evaluations is:

[Wednesday final project student evaluations](#)

[Thursday final project student evaluations](#)

### Wednesday the 10th of June

Start time:	Member Names:	Topic / Title:	Time:	Group:	Notes
9:00	Troels	Introductions		10	
9:10	Sigrid, Konstantinos, Lukas	Anomaly detection in astrophysical transient surveys		14	3 Wed 10
9:27	Sillas, Amalie, Rasmus, Frida, Hugo	Finding high temperature superconductors using ML		18	5 Wed 10
9:48	Zeyuan, Guanran, Jeppe, Mads	Short term probability direction prediction		16	23 Wed 10
10:07	Anne, Liva, Mikas	Claudio 2: Electric Boogaloo - Audio Recognition with CNN's		14	18 Wed 10
10:24	Break (20 min.)			20	
10:44	Aske, Konrad, Philip, Sagar	Beyond the Pit Wall: Machine Learning in Formula 1		16	14 Wed 10
11:03	Freja, Anika, Anna, Christian	Police violence		16	15 Wed 10
11:22	Elena, Giulia, Rafael, Isak	Using ML to predict and understand AMOC circulation strength		16	21 Wed 10
11:41	Victoria, Luca, Emma, Nicklas	NA		16	20 Wed 10
12:00	Lunch Break (1 hour)			60	
13:00	Mikkel, Sofie, Jakob, Kasper, Tobias	Football data analysis		18	9 Wed 10
13:21	Emma, Matias, Jonas	Speeches and written texts		14	28
13:38	Lydia, Tommaso, Martina	Unsupervised Graph Neural Networks for Bitcoin Fraud Detection		14	29
13:55	Matthew, Thomas, Salvador, Tiago	NA		16	30 Wed 10
14:14	Break (20 min.)			20	
14:34	Villads, Elias, Daniel, Aidan	Guess the Elo, and More: Applying Machine Learning to Characterize Chess Players and C		16	31 Wed 10
14:53	Malthe, Lea, Bastian	Determining Greenlandic ice sheet volume from radar measurements and satellite images		14	2 Wed 10
15:10	Amanda, Barbara, Oliver, Rasmus	FoCal H		16	36 Wed 10
15:29	Karl, Emil, Filip	Something Cool		14	27
15:46	Break (20 min.)			20	
16:06	Oliver, Mads, Kristoffer, Jacob, Niklas	ML in Insurance		18	13 Wed 10
16:24	Rasmus, Anna-Ida, Isabel	Airplane turbulence from wind data		14	35 Wed 10
16:41	Patrick, Kasper, Hugo, David	NA		16	37 Wed 10
17:00	Estimated end of Wednesday presentations				

### Thursday the 11th of June

Start time:	Member Names:	Topic / Title:	Time:	Group:	Notes
9:00	Troels	Introductions		10	
9:10	Rose, Zacharias, Kristian	Infer crystal properties of solid state materials using ML		14	1 Thu 11
9:27	Leonora, Thor, Nikolaj, Oskar, Emma	Muon Energy Reconstruction in IceCube via Regression		18	25 Thu 11
9:48	Patrick, Jacob, Nikolaj, Martin	Classification of AI generated images		16	26
10:07	Ulrik, Christopher, Jakob, Ludvig	Scrandle Predictor		16	6
10:26	Break (20 min.)			20	
10:46	August, Catrine, Emma	This Could Be Anywhere		14	22
11:03	Sebastian, Asger, Sophus, Nicolaj, Peter	Turbulence Level in Airport Operations by FORCE Technology		18	7
11:24	Emma, Matias, Jonas	Speeches and written texts		14	28
11:41	Debjani, Maryam, Ingrid, Urszula	Analyzing Single Cell Sequencing Data of Immunological Cells in Covid patients		16	24
12:00	Lunch Break (60 min.)			60	
13:00	Jona, Victoria, David, Natalie	NA		16	11
13:19	Peter, Vasileios, Aikaterini, Carla	Predicting the Past		16	10
13:38	Pelle, Sebastian, Nicholas, Søren, Christian	Football dream team using ML		18	19
13:59	Jacob, Thomas, Christian, Benjamin, Magnus	NN analysis of Danish airplane photos & Chess game evaluation		18	8
14:20	Break (20 min.)			20	
14:40	Milan, Mathias	Neuro ML		12	16
14:55	Bastian, Frida, Julie, Thea	Claudio - Audio Recognition with CNN's		16	17
15:14	Sebastian, Louie, Alfred	Ball player evaluation		14	33 Thu 11
15:31	Ziyan, Chirantha	Predicting Extreme Price Events in Electricity Markets Using Ensemble Learning		12	34
15:46	Estimated end of Wednesday presentations				

# Exam location

Wednesday & Thursday:

~~HCO~~, Aud. 2

