# **Advanced Machine Learning**

Course syllabus

Prof. Pierre Geurts p.geurts@uliege.be

Prof. Gilles Louppe g.louppe@uliege.be

Prof. Louis Wehenkel l.wehenkel@uliege.be



To know, read.

To learn, write.

To master, teach.

(Hindu proverb)

#### Us

#### This course is given by:

- Pierre Geurts (p.geurts@uliege.be)
- Gilles Louppe (g.louppe@uliege.be)
- Louis Wehenkel (I.wehenkel@uliege.be)
- Researchers from the department
- ... and you!



#### Lectures

- This course is organized as a journal club.
- Reading and presentation of recent machine learning research papers.
- Every week, one of us will:
  - select a research paper
  - introduce the necessary background
  - o present the paper
    - or watch a recorded talk from the authors.
  - discuss and criticize its content.
- Goal: training for research and development in machine learning.









WWW.PHDCOMICS.COM

Read the papers!

Credits: Jorge Cham, PHD Comics. 5 / 10

## **Seminars**

A couple of lectures will be organized as seminars:

- either with invited speakers
- or with recorded talks, followed by a discussion.

# Requirements

We strongly recommend to follow this course only after having followed both:

- ELEN0062 Introduction to machine learning
- INFO8010 Deep learning

#### **Course hub**

All important information about the course is available on the course web page github.com/glouppe/info8004-advanced-machine-learning.

- Schedule
- Slides and materials
- Papers to read.

# Reading and presentation assignment

- Read a selected machine learning paper.
- Prepare a 30-minute lecture, covering the necessary background and discussing the paper.

More details to be announced later.

### **Evaluation**

- Exam (60%)
- Reading and presentation assignment (40%)

Let's start!