# **Advanced Machine Learning**

Course syllabus

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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,
  - 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.

#### **Materials**

Papers and slides are available at github.com/glouppe/info8004-advanced-machine-learning.

- Slides posted online the day before the lesson (hopefully).
- Papers announced ~1 week before the lectures.

# **Agenda**

See the course web page (tentative and subject to change).

# Reading and presentation assignment

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

More details to be announced later.

### **Evaluation**

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

Let's start!