# CS-C1000 – Introduction to Artificial Intelligence Practicalities

**Arno Solin** 

March 5, 2021







### Lecturer

#### Dr. Arno Solin

- Assistant Professor in Machine Learning, Department of Computer Science, Aalto
- Coordinating professor of the Deep Learning program of the Finnish Center for Artificial Intelligence (FCAI)
- Adjunct Professor, Tampere University
- Work in industry and academic institutions abroad (Sheffield, Uppsala, and Cambridge)
- Research focus on probabilistic methods and real-time ML

# **Teaching assistants**



Dr. William Wilkinson
william.wilkinson@aalto.fi

- Practical arrangements on the course
- Tuesday exercise sessions
- Contact Will if you have questions



**Martin Trapp** 



Yuxin Hou



**Paul Chang** 

### **Content and outcomes**

#### Content:

This course is intended as a primer in artificial intelligence (AI). The course goes through basic concepts (with examples) in AI, covering topics in symbolic AI, data mining, and machine learning (ML). The overall goal is *demystifying* these concepts and giving the students a basic understanding about the past, the present, and a bit about the future of AI. This course is intended as a non-technical introduction, which means that prior skills in programming or mathematics are not required.

#### Outcomes:

After the course, the student has an understanding about basic concepts in AI and ML. The student should understand the setup behind common AI systems, and know some of the possibilities and limitations they have.

# **Assessment and prerequisites**

#### Assessment:

Lecture quizzes, essays, and computer exercise demos. Each of these need to be completed, and the grade is compiled by combination of these three.

#### Prerequisites:

Students from all study programs are welcome, and thus no formal requirements are set. Basic understanding about concepts in high-school mathematics and statistics.

- Grading scale: pass/fail
- Awarded credits: 3 cr

# **Lectures on Fridays**



What is AI?



Reinforcement learning



**Machine learning** 



Search, logic, and symbolic Al



**Deep learning** 



Impact and ethics of Al

# **Guest lectures this year**



Janne Pulkkinen Head of IT innovation KELA



Markus Ojala Staff Data Scientist Unity Technologies

## **Exercise sessions on Tuesdays**



comprehension





assignment B





Course Essay

- Points based on quizzes in MyCourses
- Computer assignments only require a web browser
- Course essay to be handed in after the course

### FAQ

- Do I need to attend lectures and/or exercise sessions? No. Of course, attending helps in doing the quizzes.
- Will the slides/lectures be available online? Yes.
- Is this course suitable for my background? Too techical? Hopefully not. Too non-technical? Perhaps.
- How is the course graded (is there an exam)? No exam, the quizzes and exercises count.

### Questions

- ► Please provide feedback on the lectures in MyCourses.
- ▶ I'm available during the exercise sessions and after lectures.