

Machine Learning and the Physical World

Projects

Carl Henrik Ek - che29@cam.ac.uk

13th of November, 2020

<http://carlhenrik.com>

Week 7 Thursday Javier Gonzales - Micro\$oft Research
Cambridge

Friday Q/A

Week 8 Thursday Scott Hosking - British Antarctic
Survey, ATI, AI4ER CDT

Friday Wrap up of the course and outlook

Projects

- Groups of three

¹you can obviously do this anonymously as well.

- Groups of three
- This nature of this work is collaborative

¹you can obviously do this anonymously as well.

- Groups of three
- This nature of this work is collaborative
- Concluded with a report

¹you can obviously do this anonymously as well.

- Groups of three
- This nature of this work is collaborative
- Concluded with a report
- Assessed with a **viva** on the report **and** how it relates to the material in the course

¹you can obviously do this anonymously as well.

- Groups of three
- This nature of this work is collaborative
- Concluded with a report
- Assessed with a **viva** on the report **and** how it relates to the material in the course
- The viva will also be where you get feedback, and can give feedback¹

¹you can obviously do this anonymously as well.

- You have seen 5 weeks of quite intense material

- You have seen 5 weeks of quite intense material
- You have done 9 worksheets of material

- You have seen 5 weeks of quite intense material
- You have done 9 worksheets of material
- \Rightarrow you have already done the material

- You have seen 5 weeks of quite intense material
- You have done 9 worksheets of material
- \Rightarrow you have already done the material
- In the project you should **show** what you have learnt

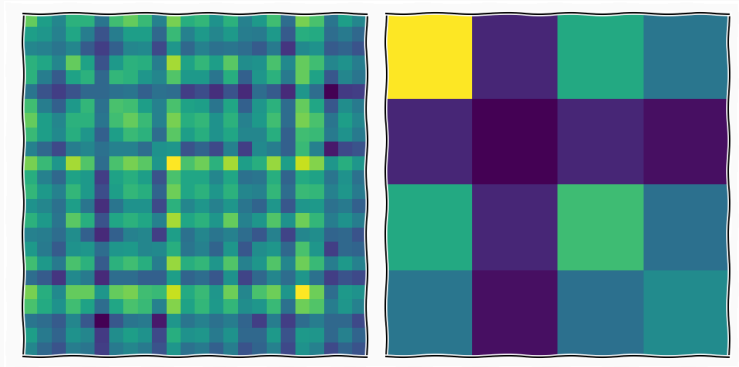
"How Interested are you in a Methodological Project? For example looking at advanced methods for Bayesian Optimisation, Uncertainty Quantification or Gaussian Process models? This type of project will focus on the more theoretical side of the machine learning methods that we use"

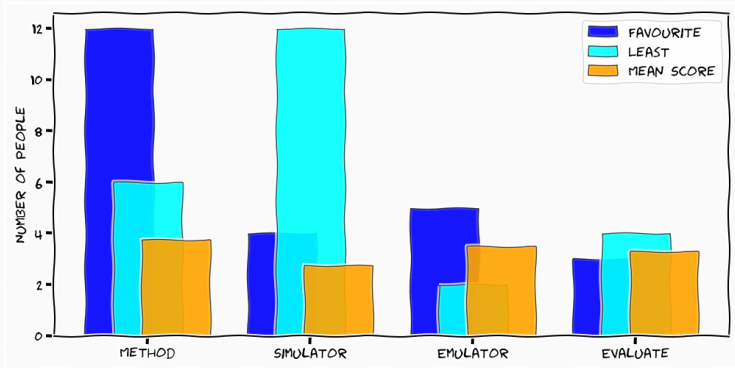
"How interested are you in a project focused on building an evaluating a simulator? A simulator aims to simulate the behavior of system so that we can run experiments and evaluate the system. This will most likely involve a significant amount of implementation to build up a system that can be analyzed."

"How interested are you in a project focused on building and evaluating emulators? This would imply picking an already existing simulator and look at different ways you can describe a surrogate model as an emulator."

"How interested are you in a project focused on using/evaluating a previously existing simulator/emulator? You will focus on taking a system and providing an analysis to try and answer questions about the real world. An important question to answer is how relevant the conclusions you can draw are for the real world."

Group Allocations





eof