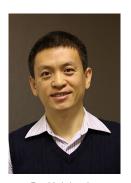
COM4509/6509 Machine Learning and Adaptive Intelligence

Department of Computer Science, The University of Sheffield

Instructors



Dr. Mauricio A. Álvarez (Module leader)



Dr. Haiping Lu

Teaching assistants (I)



Areeb Sherwani (head TA)



Lawrence Schobs



Thomas McDonald

Teaching assistants (II)



Magnus Ross



Hongrui Shi



Benediktas Valys



Ahmed Alajrami

Content of the module

Week	Starting	Subject	Lecturer
1	Sept 27	Intro. to ML and Review of Prob-	MA
		ability	
2	Oct 4	End-to-End machine learning	MA
3	Oct 11	Decision trees and ensemble	MA
		methods	
4	Oct 18	Linear regression	MA
5	Oct 25	Automatic differentiation	MA
6	Nov 1	Logistic regression	HL
7	Nov 8	Neural networks	HL
8	Nov 15	Unsupervised learning	HL
9	Nov 22	Deep generative models	HL
10	Nov 29	Advanced applications of ML	HL

Materials available to you

- □ **Slides** accompanying the lectures, posted in Blackboard (BB).
- Jupyter Notebook. Each session will be accompanied by a Jupyter Notebook to illustrate practical aspects of the Lecture. Lab sessions will be based on these Notebooks.
- Github repo for the module:

https://github.com/maalvarezl/MLAI/

- Exercise sheets. Additional exercise sheets will be available with solutions released a week after.
- □ **Videolectures**. We recorded several videolectures to deliver the module last year. This will be offered as supplemental material. Beware that not all the content will be the same.

If you're at Sheffield ...

- Face-2-face (f2f) Lectures and Labs.
 - Tuesdays, 10:00 am. A hour-long lecture in Diamond LT4.
 - Wednesdays, 12:00 pm. A hour-long lab in Diamond PC Rooms 1 and 3.
 - Fridays, 1:00 pm. A hour-long lecture in Diamond LT3.
- Online synchronous sessions with the TAs. We will offer two one-hour online help-desk sessions per week.
 - Mondays, 9:00 am.
 - Thursdays, 4:00 pm.

Instructions about how to connect will be posted on BB.

 Discussion board. You can use the Discussion Board in Blackboard to ask questions (managed by the instructors).

What if you haven't arrived at Sheffield?

- Encore. Lectures are automatically recorded through Encore. You will be able to access these recordings just after each f2f lecture (accesible from BB).
- Lab session. In parallel to the the lab session that runs on Wednesdays 12 pm, there will be a BB collaborative link where you'll be able to receive help online.
- Online synchronous sessions with the TAs. We will offer two one-hour online help-desk sessions per week
 - Mondays, 9:00 am.
 - Thursdays, 4:00 pm.

Instructions about how to connect will be posted on BB.

- ☐ For the first five weeks, I'll be offering two office hours through BB (Collaborative link).
 - Wednesdays, 10:00 am to 11:00 am.Fridays, 9:00 am to 10:00 am.

Office hours

- For the first five weeks, I'll be offering two office hours through BB (Collaborative link).
 - Wednesdays, 10:00 am to 11:00 am.
 - Fridays, 9:00 am to 10:00 am.

We will use Blackboard for:

- Sharing course material.
- Office hours with the instructor.
- A discussion board.
 - The discussion board IS for:
 - asking general questions about the contents of the lectures/labs.
 - clarifications about the assignments.
 - if you know the answer to somebody else's question, please answer. Help your peers!
 - When it comes to the assignment, the discussion board IS NOT for:
 - asking us how to solve the assignment.
 - giving the solution to what is being asked in the assignments.
 - posting screenshots of your code and the errors in your code asking us to debug your code.
- Only email the Module leader if you have personal questions or issues.
 Otherwise, please use the discussion board.
- Please, be professional and polite.

Assessment

- An assignment (% 50)
 - First part to be released on Friday, Nov 5, 3:00 pm.
 - Second part to be released on Friday, Nov 19, 3:00 pm.
 - Handle in Friday, Dec 3, 3:00 pm.
- Exam (% 50), at some point between Jan 17 and Feb 4, 2022 (TBA).
 - The exercise sheets contain typical exam questions. We strongly encourage you to work on the exercise sheets on a weekly basis rather than waiting until the Exam to look at the solutions for those exercises.

Marking and Feedback

Taken from the Student Handbook:

"Your lecturer will mark your work within a reasonable period. A reasonable period is

- within a week, for short question sheets from small classes;
- within three working weeks, for larger pieces of work or work for very large classes (if this includes a vacation this is five weeks),"

Health & Safety

Take precautions on campus

- Wear a face covering in crowded places and when sitting close to others
- Get vaccinated if you haven't already
- Wash your hands regularly hand sanitiser is available across campus
- Follow one-way systems make space for each other when moving around
- Take two Covid-19 tests each week
- Stay at home if you feel unwell, even if it's just a cold



Enjoy campus safely