

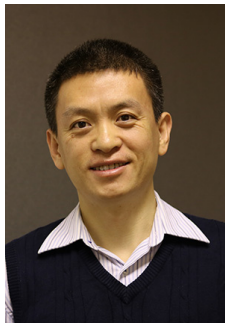
COM6509 Machine Learning and Adaptive Intelligence

Department of Computer Science,
The University of Sheffield

Instructors



Dr. Mauricio A. Álvarez (Module leader)



Dr. Haiping Lu

Teaching assistants



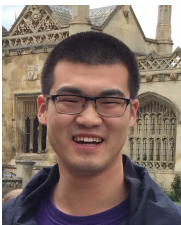
Areeb Sherwani (head TA)



Senee Kitimoon



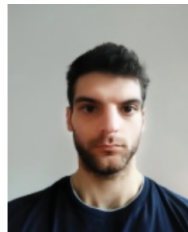
Nada Yehia



Chunchao Ma



George Chrysostomou



Michail Mamalakis

Content of the module

Week	Starting	Subject	Lecturer
1	Oct 26	Intro. to ML and Review of Probability	MA
2	Nov 2	End-to-End machine learning	MA
3	Nov 9	Linear regression	MA
4	Nov 16	Decision trees and ensemble methods	MA
5	Nov 23	Automatic differentiation	MA
6	Nov 30	Logistic regression	HL
7	Dec 7	Neural networks	HL
8	Dec 14	Unsupervised learning	HL
9	Jan 18	Deep generative models	HL
10	Jan 25	Advanced applications of ML	HL

How the module will be delivered? (materials)

- ❑ The materials for each week will be posted in Blackboard or GitHub before Mondays at 9:00 hrs.
- ❑ **Videlectures.** The lecture in the form of short videos for you to watch (posted in Blackboard).
- ❑ **Slides.** Slides accompanying the videolecture (posted in Blackboard).
- ❑ **Jupyter Notebook.** Each session will be accompanied by a Jupyter Notebook to illustrate practical aspects of the Lecture. You can run the Notebook on your own time (posted in GitHub).
- ❑ **Github repo:** <https://github.com/maalvarezl/MLAI>
- ❑ **Additional exercises.** Additional exercise sheets will be available.

How the module will be delivered? (interactions)

❑ **Online synchronous sessions with the Instructor.**

- Two online synchronous sessions with the Instructors using Blackboard Collaborate: Tuesdays and Thursdays from 11:00 hrs to 12:00 hrs.
- We will use these one-hour sessions for interactive learning (e.g solving exercises individually and as groups, asking questions about material of the video lecture, etc).

❑ **Online synchronous sessions with the TAs.** We will offer several online help-desk sessions run by the TAs on a time slot that will be announced in Blackboard.

❑ **Face-to-face sessions.** Additionally, you will have face-to-face sessions with a TA.

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

We will use Blackboard for:

- ❑ sharing course material.
- ❑ a discussion board.
 - The discussion board IS for:
 - ▶ asking general questions about the contents of the lectures.
 - ▶ *clarifications* about the assignments.
 - ▶ if you know the answer to somebody else's question, please answer. Help your peers!
 - **The discussion board IS NOT for:**
 - ▶ asking how to solve the assignment.
 - ▶ give the solution to what is being asked in the assignments.
- ❑ Only email the Module leader if you have personal questions or issues. Otherwise, please use the discussion board.
- ❑ **Please, be professional and polite.**

Assessment

□ Assignments

Assign.	Subject	Hand out	Handle in	%
1	Weeks 1 to 5	Nov 13	Nov 27 (11:00)	30
2	Weeks 6 to 8	Dec 11	Jan 22 (11:00)	30
Total				60%

- First Blackboard quiz, Thursday Nov 12 starting 18:00 (24-hrs to submit solution), 20%.
- Second Blackboard quiz, Thursday Dec 10 starting 18:00 (24-hrs to submit solution), 20%.

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),”