THE UNIVERSITY *of* EDINBURGH
informatics

Applied Machine Learning (AML)

Class Starting at 4:10pm

Oisin Mac Aodha • Siddharth N.

Applied Machine Learning

Week 9: Recommender Systems and Neural Networks

This slides will be made available on the project website after the class.
This session will be recorded.

Overview

1) Brief discussion of coursework
2) Discussion of week 9’s topics
3) Outline your tasks this for week

https://groups.inf.ed.ac.uk/teaching/aml

Coursework Poll

Coursework General Advice

- **Read the instructions**
  - Make sure you name the submission file correctly.
  - Make sure you have added any section names you were asked to.
  - Make sure you use the correct template and do not edit the font or margins.
  - Add your student ID, not names.

Coursework General Advice

- Look at the example reports on the course webpage: https://www.inf.ed.ac.uk/teaching/courses/iaml/aml/mini-project

- Do **not** leave the writing until the last few days.
  - Writing is important, don't try to cram it all in at end.
  - We only mark the report
- Make sure your text is clear, e.g. ask a teammate to read your section.
- Worth 40% of final grade.

Extra Information

- **Statement of Contribution**
  - Add short description of how each member of the group contributed to the project at the end.
- **Generative AI**
  - Note that *any* use of generative AI must be explicitly acknowledged and a description of how it was used included as part of your submission.

Both of the above should go after references, and do not count towards your page limit.

Coursework Submission

- **Submit via Learn**
  - Learn -> AML -> Assessment -> AML Coursework (Main)

- We will send out instructions.
- Read the instructions carefully and make sure you submit correctly.
  - e.g. do not email your submission to us, we cannot accept them.
  - Submit on time to avoid penalties.
  - Don’t leave until the last minute to submit for the first time.

Supplementary Material

- **You will upload your code and latex source due 28th Nov.**
- Details to follow soon

Coursework Submission - Dates

- Thursday, 21st Nov 2023 - 12:00 PM (i.e. afternoon)
- Instructions for submission
  - Only report PDF due on 21st Nov
  - Submit via Learn

Coursework Submission - Extensions Policy

- **Extensions are not allowed** following **Rule 2** of the School of Informatics' Late Submission Rules and Penalties.
  - This is the default for group projects in SoI

https://web.inf.ed.ac.uk/infweb/student-services/taught-students/information-for-students/information-for-all-students/your-studies/late-coursework-extension-requests

Academic Misconduct

- Make sure you are familiar with the School's Good Scholarly Practice
- Watch the short video (~10 mins) here if unsure:
  - https://web.inf.ed.ac.uk/infweb/admin/policies/academic-misconduct
- See course website for guidance on use of Generative AI (e.g. ChatGPT)
  - https://groups.inf.ed.ac.uk/teaching/aml/about/#guidance-on-the-use-of-generative-ai-

Exam

- The exam will be on campus on **Dec 12th** and will be **closed book**
- The exam will be 2 hours in duration
- The format will be 2/3 questions as in all previous AML (INFR11211) and IAML (INFR10069)

Exam - https://exams.is.ed.ac.uk

Venue

This exam is split over multiple locations by surname (please check your personalised timetable):

McEwan Hall

Date: Thursday, 12th December 2024
Time: 2:30 p.m. to 4:30 p.m.
Duration: 2:00

McEwan Hall - Foyer Room 1 & 2 (Enter via the Pavilion)

Date: Thursday, 12th December 2024
Time: 2:30 p.m. to 4:30 p.m.
Duration: 2:00

McEwan Hall - Foyer Room 3 & 4 (Enter via the Pavilion)

Date: Thursday, 12th December 2024
Time: 2:30 p.m. to 4:30 p.m.
Duration: 2:00

Note: two different rooms in the same building

Exam Review Session - **Next Week**

- Next week's class session (19th Nov) we will discuss the structure of the exam and cover some best practices
- This will be our final Q&A session for the year
- **Please ask questions in advance on Piazza**

Neural Network Quiz

Neural Network Interactive

https://mlu-explain.github.io/neural-networks

Neural Network Demo

Neural Networks in the browser

https://playground.tensorflow.org/

Note: the output node also has a bias that is not visible in the interface
https://github.com/tensorflow/playground/issues/90

Another Neural Network Demo

Neural Networks in the browser

https://cs.stanford.edu/people/karpathy/convnetjs//demo/classify2d.html

Recommender Systems Quiz

Week 9: Your tasks for this week

1) Attend and complete **Lab 4** - solutions will be online later this week
2) Watch videos for week 9 - *Ethics and Fairness* and *Further Topics*
    a) No videos for week 10
3) Ask questions on Piazza if stuck
4) Start **Tutorial 4** which takes places next week
    a) This is a discussion based tutorial and worth attending
5) Continue working on the **coursework - due next week (21st Nov)**