

Advanced Topics in Machine Learning

Revision and Exam preparation

Topics

- Exam structure
- Format
- Notes
- Tips for exams

Exam

- 3 questions, 25 marks each. One for each track
 - Answer any 2
- Material
 - See guidance for each track

Exam format

- 2 hrs
- Calculators not allowed
- Notes permitted
 - 1 A4 sheet (2 sides)
 - Any format: handwritten, printed, handwritten on tablet and then printed...
 - Magnifying devices not permitted!

Thoughts on notes

- Prepare your own notes
 - In the time pressure of exam, hard to understand someone else's notes
 - Your notes can be customized to stuff that you need the most
 - Preparing notes is a great way to study!
 - Identify what is important
 - Identify what you need to study better
- Prepare and update notes
- Make the font large enough!
 - Digital notes may be unreadable in print. Print and make sure you can read.
 - Too small and too much notes can be a liability in time pressure

Answer script and answer lengths

- Each question has 1 page in answer script
 - To make scanning easier after exam
 - Please don't write 1 page for all answers!
- Even 1 mark questions can have 1 page!
 - Typically expected to be answerable in 1-3 lines.
- Depending on your thoughts and writing, you are free to use 1 page plus additional pages
 - But think carefully what you are writing, why the space is necessary
 - Write what the question is asking for
 - Make the main points easy to find.

Tips for exams

- Take a bit of time and read all questions
- When answering, don't just start writing!
 - Read the question carefully and stop for a minute
 - Think what the question may be looking for. You have attended the classes. What is likely the intent of the of the question in this course and track?
 - Compose the outline
 - Make use of additional/back pages to compose your thoughts: note points, try out calculations, think how to concisely state the answer
- Write the short direct answer to the question.

Tips for exams

- Questions with few marks (1-3) are almost always short answers
- Higher mark does not necessarily need a long answer.
 - May be the question is hard or tests an important concept
 - A 5 mark question probably cannot be answered in 2-3 lines, but also does not need multiple pages
- Aim to write **short** answers that address all key points
 - Long answers are risky
 - suggest you do not understand what is relevant
 - Increases risk of writing something wrong/inconsistent
 - Makes it hard to find the real point in the long text
- A question may look ambiguous (multiple possible answers or interpretations)
 - If unsure state your interpretation and reasoning briefly. Consider addressing multiple possibilities

Tips for exams

- Identify key points and make them easy to find.
 - Write them first, and then add more thoughts
 - Use Lists/bullet points
 - Make the main point easy to find in other ways
- Pictures/diagrams are useful in getting to the point and showing examples to show that you understand the topic.
- Handwriting should be readable (not beautiful, but readable)
 - E.g. each letter/word should be readable on its own without the context!
 - Not too small, not too large
 - Cramped or cluttered writing are hard to mark. Make sure that letters are reasonably sized and there is space between lines

Tips for exams: Overall principles

- Consider what the question is looking for or testing.
- Try to address that.
- Compose the answer/logic before starting to write.
- Write short answer.

- The marker wants to give you marks!
 - Make it easy for them to find the reasons for it!

