Current Topics in Data Science
&
Current Topics in Artificial Intelligence and Machine Learning

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Final Assessment

- Summative assessment – marks count!
  - Mid-Term Assignment, Week 6 (40%)
    - Marks/Feedback released this week
  - End of Term Assignment, released this week
    - Individual recorded video presentation: a ‘critical review’ of an assigned topic (40%)
    - Peer assessment of ~5 presentations (10%)
    - Peer-reviewed grade (10%)

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Topics

- Each student will be assigned a single topic
  - One of the topics presented within the Module
- Each Assignment must be individual effort
- Use the guidelines on Canvas
  - Literature review
  - Critical review

1. Selecting Papers

- Think about what specific area within this topic interests you
- What interests other researchers within this field.
- Must be related to the module you are taking and therefore you MUST identify an area of research within this topic.
- Revisit the module content for this topic, listen to the talks again, and reads the papers provided to you.
- Browse recent issues of periodicals and journals in this field.

2. Search for literature

- Define your source selection criteria (i.e. articles published between a specific date range, focusing on a specific application (Robotics, Imaging, or using a specific methodology such as CNN).
- Using keywords, search a library database:
  - Google Scholar is a good start!
- Reference lists of recent articles and reviews can lead to other useful papers:
  - Read around the topic
- Include any studies contrary to your point of view.

3. Read and evaluate

- Evaluate and synthesize the studies' findings and conclusions:
  - assumptions that some or most researchers seem to make
  - methodologies, testing procedures, subjects, data tested
  - conflicting theories, results, methodologies
  - popularity of theories and how this has/has not changed over time
- Note to use the guidelines provided to you regarding Critical review.

4. Organize by developing subtopics

- Findings/methodologies that are common/contested
- Important trends in the research
- The most influential theories
- Develop headings/subheadings that reflect the major themes and patterns you detect

5. Develop a set of discussion

- Your presentations should be centred around the following sub-heading:
  - What are the main highlights of topic?
  - What are the main Applications?
  - What are the main open questions?
  - What are the main technical and/or mathematical challenges?
- A good overview of the Topic and the current trends that a computer scientist can appreciate.

6. Develop your presentation

- Follow the structure you developed above, in steps 5.
- Make certain that each section links logically to the one before and after.
- Structure your sections by themes and create a slide for each bullet point in Step 5.
- Plan for 90 seconds per bullet point and 1 slide.
- Use bullet points/figures to help you talk about each aspect coherently.

7. Format and marking criteria for Data Science

- a recorded video presentation using PowerPoint (or equivalent) of no more than 5 minutes: No more than 4 slides
  - Slide 1: Student ID, Module Name and the Topic of your Review
  - Slide 2: What are the main highlights of topic? ~ 90 seconds
  - Slide 3: What are the main Applications? ~ 90 seconds
  - Slide 4: What are the main open questions? ~90 seconds

7. Format and marking criteria for AI & Machine Learning

- a recorded video presentation using PowerPoint (or equivalent) of no more than 6 minutes: No more than 5 slides
  - Slide 1: Student ID, Module Name and the Topic of your Review
  - Slide 2: What are the main highlights of topic? ~ 90 seconds
  - Slide 3: What are the main Applications? ~ 90 seconds
  - Slide 4: What are the main open questions? ~90 seconds
  - Slide 5: What are the main technical and/or mathematical challenges? ~90 seconds

Event Code: **25468753**

https://https://myuob.bham.ac.uk/dashboard/student

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Submission

- Video Recording, via CANVAS
- Submit TWO copies:
  - One for Academic Review
  - One for Peer review
- Details of Peer Review after the submission deadline, via CANVAS

Questions?

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