## Current Topics in Data Science (Dubai)

Current Topics in AI and Machine Learning (Dubai)



### Summative Assessment

- Marks count!
  - Mid-Semester Assessment, Week 6 (40%)
    - Marks/Feedback released last week
  - End-Semester Assessment, released
    - Individual recorded video presentation: a 'literature review' of an assigned topic (40%)
    - Peer assessment of ~5 video presentations (10%)
    - Peer-reviewed grade (10%)



## **Topics**

- Each student has been assigned a single topic
  - One of the topics presented within the Module
- Each submission must be individual effort
- Each peer review 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 read the papers provided to you.
- Browse recent issues of periodicals and journals in this field.



### 2. Search for literature

- Define your source selection criteria (e.g., articles published between a specific date range, focusing on a specific area)
- 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



#### 3. Read and evaluate

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



## 4. Organise by developing subtopics

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



# 5. Develop a set of discussion points

- Your presentations should be centred around the following sub-heading:
  - What are the main highlights of the topic (i.e. introduction and motivation)?
  - What are the main applications?
  - What are the main open research questions?
  - What are the main 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 section 5.
- Make certain that each section links logically / coherently to the one before and after.
- Structure your sections by themes and create a slide for each bullet point from Section 5.
- Plan for 90 seconds per section and 1 slide.
- Use bullet points/figures to help you talk about each aspect coherently and fluently.
- Avoid reading from a script, as it become monotonous and artificial / robotic.



#### 7. Format

- 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, Degree Programme, 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 challenges? ~90 seconds



### 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



# Note for MSc AIML (Dubai) students only

• Based on your stronger understanding and experience of AI/ML through the degree programme in comparison to MSc AICS and MSc DS, you are expected to demonstrate a stronger in-depth understanding of the chosen area and topic through sharing insights and literature understanding in all four aspects (highlights, applications, open questions, and challenges). This will be considered for marking the submissions.



## Questions?

