



THE UNIVERSITY of EDINBURGH
informatics

Informatics Research Review: Tutorial 2

Academic year 2024-2025

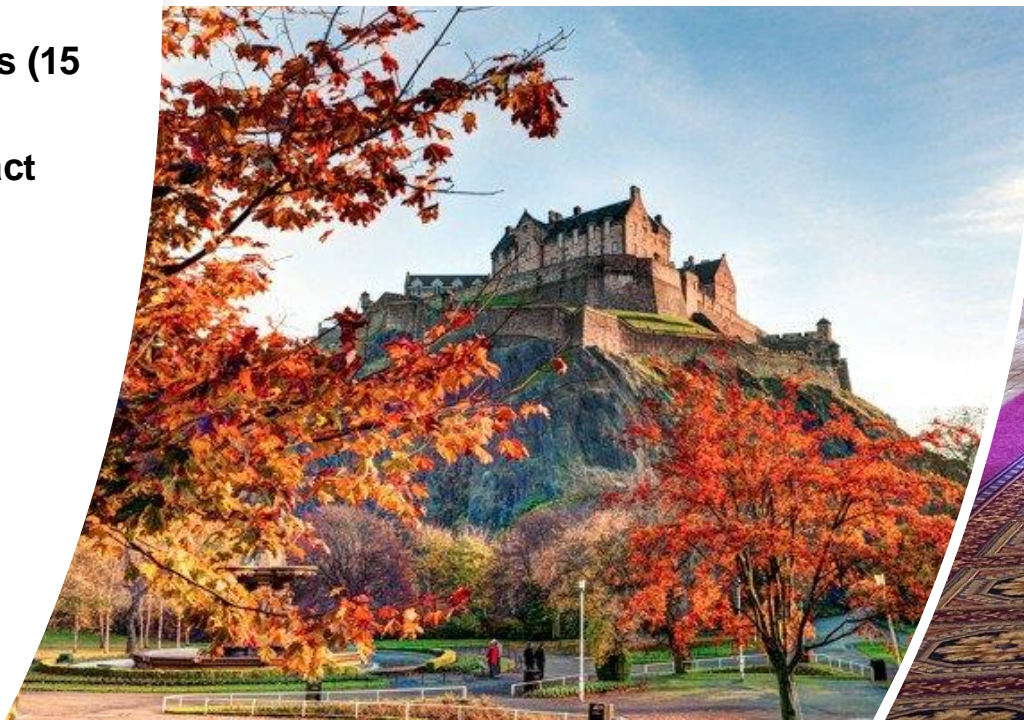
Semester 1, Week 4



THE UNIVERSITY OF EDINBURGH
INFORMATICS FORUM

Overview

1. **Exercise A: (Think-Pair-Share) Finding Interesting Research Topics (20 min)**
2. **Exercise B: Identify Subtopics (15 min)**
3. **Exercise C: Writing an Abstract (25 min)**



Exercise A: Finding Interesting Research Topics - *Think* (5 min)

Task: Individually, reflect on your specific interests related to your course or program (e.g. AI, Robotics, HCI, or others). Identify and write down 2-3 potential research topics you could investigate.

Hints:

1. What are the current trends or challenges in your field of interest?
2. What specific topics have sparked your curiosity?
3. Where do your chosen topics hold significance?
4. Is there a specific problem, question, or theme you'd like to explore more deeply?



Exercise A: Finding Interesting Research Topics – *Pair* (5 min)

Task: Pair up with a classmate to discuss the topics you came up with.

Discussion:

1. Explain why you are interested in each topic.
2. Ask for feedback: Does your partner find any of your topics particularly compelling or relevant? Are there ways to refine or focus their topics more effectively?
3. Explore any new ideas that might emerge from the discussion.



Exercise A: Finding Interesting Research Topics – *Share* (10 min)

Task: Share your favourite research topic with the whole class

Discussion:

1. Is the topic clear and focused?
2. How to improve/refine the topic?



Exercise B: Narrowing Down a Topic (5 min)

Individually:

1. Go to **scholar.google.com**
2. Enter your favourite topic from the **Exercise A** into the search bar.
3. Examine the titles of the papers suggested by the search results.
4. Write down at least 3 subtopics that interested you related to your general topic that appeared in the search results. For example, if your general topic was “Adaptive Learning through Artificial Intelligence”, your subtopics might include “Ethical Considerations in Adaptive Learning through AI”, “Increasing Engagement within AI-based Adaptive Learning” and “Challenges in AI-based Adaptive Learning”.
5. Based on the subtopics identified, pick one that interested you the most and detail what you want to learn more about it. You may use the reflections from **Exercise A** to guide your choices here.
6. From the above, identify 3 papers on **scholar.google.com** that would help you starting to learn more about this subtopic.
7. (optional) Add the papers to your reference management system (e.g., Mendeley), attach a tag and a general note.



Exercise B: Narrowing Down a Topic (10 min)

In Group :

1. Share your (favourite) subtopic(s) with the whole class
2. Provide details about the subtopic(s) revealing aspects that interest you
3. Discuss if these subtopics are narrow/broad enough for your research review



Exercise C: Writing an Abstract (5 min)

Keep it concise: rule of thumb 150-250 words

Keep it descriptive: do not evaluate or defend the research

Five Essential Elements of a Good Abstract:

- **Introduction:** Provides context and background for the research, outlining the problem or question being addressed.
- **Purpose/Aims:** Clearly states the main goal(s) of the research.
- **Methods:** Briefly describes the research methods or approach used to gather data and conduct the study.
- **Results/Main Findings:** Summarizes the main findings or outcomes of the research.
- **Conclusion:** Offers a concise interpretation of the results, highlighting their significance and potential implications.



Exercise C: Writing an Abstract (15 min)

Individually or in pairs:

From the paper emailed to you in advance of the tutorial, summaries the following items:

1. Introduction
2. Purpose
3. Methods
4. Key results
5. Conclusion



Exercise C: Writing an Abstract (5 min)

In Group:

1. (2 volunteers) present the component of the abstract
2. Discuss with the entire group and compare with the paper abstract

