

## Outline of the thesis manuscript

The manuscript of a thesis can be in one of two types A and B. The type is agreed between student and supervisor, since it depends on the topic.

### ***Type A manuscripts:***

- Abstract
- Chapter 1: Introduction, including motivation, scientific questions, outline of the proposed approach, and overview of the thesis
- Chapter 2: Underpinnings of the research domain, key terms, key papers
- Chapter 3: Related work in the area of the scientific questions
  - This chapter may be merged with the previous one, if the underpinnings of the domain are obvious.
- Chapter 4: Proposed approach, including a pictorial overview of the proposed design and a detailed description of the components/elements of the approach
  - This chapter may be followed by a chapter on the technical implementation.
- Chapter 5: Evaluation, including evaluation criteria for each of the scientific questions (cf. Chapter 1), description of the experimental design for the evaluation, presentation of the materials (e.g. datasets) used for the evaluation, results for each scientific question and discussion of the results
  - If the evaluation is particularly elaborate, it may form a separate chapters.
  - If the discussion is very extensive, it may become a separate chapter.
- Chapter 6: Summary and Outlook, including achievements, threads to validity, possible scientific questions for a followup research work
- Reference list
- Appendices if any

### ***Type B manuscripts:***

- Abstract and Chapter 1 as for Type A manuscripts
- Chapter 2: Underpinnings of the research domain and of the application domain, citing related scientific literature from both domains
- Chapter 3: Materials for the scientific investigation
- Chapter 4: Proposed approach as for Type A, but including also evaluation criteria and design of the evaluation procedure
- Chapter 5: Results of the evaluation
- Chapter 6: Discussion of the results and placement in the related scientific literature
- Chapter 7: Summary and Outlook as for Type A
- Reference list
- Appendices if any

Guidelines on the layout can be found on the website of the KMD Lab.

**Note:** The PRISMA methodology should be used for literature collection.

### **Outline of a bachelor/master thesis proposal**

This document will be later extended into the thesis manuscript, so it should have the same form. It is a document of no more than 5 pages that must contain:

- title
- the scientific question(s) addressed in the thesis [later in Ch 1]
- a brief plan containing the tasks to be performed in order to address (each of) the scientific question(s) [later in Ch 4]
- at least 5 scientific publications of relevance, and a paragraph for each of them [later in Ch 3]
- how is recognized that the scientific question(s) were answered well [later in Ch 5 for type A manuscripts, resp Ch 4 for type B]
- and an appendix containing
  - a workplan for the period t<sub>3</sub> to t<sub>5</sub>
  - the original problem specification, as given by the supervisor
  - constraints (if any), eg to use a specific programming language

It is strongly recommended to write the thesis proposal in latex and organize the literature in bibtex.