

Bachelor and Master Thesis Guidelines

Chair of Practical Computer Science I: Data Analytics

1 Application

- To apply for a thesis, contact the chair and provide your CV, transcripts, and a filled-out copy of the [Master Candidate Profile form](#) (only CV and transcripts for bachelor thesis).
- You can suggest your own topic, pick one from the topic list at our [website](#), or ask for additional topics (which we always have). In the latter case, please let us know your general interests.
- If you want to write your thesis in cooperation with a company, please send the name and contact details of your contact in the company with your application. Make sure that the company can provide you with all required resources (e.g., datasets, servers, ...). Before starting your thesis, the company will have to sign a [supervision agreement](#).

2 Topic Proposal

- Before you can start your thesis, you need to provide a convincing topic proposal.
- The proposal must be 2 pages long (excluding references).
- The proposal should include:
 1. Background & motivation,
 2. Goals (must-have, nice-to-have),
 3. Work plan.
- Do not spend too much space on explaining the preliminaries. Focus on what you want to do.
- You may (or should) discuss the focus and scope of your thesis with your advisor and/or professor.
- Hand in the proposal only if you think it is ready.
- You may receive revision requests for your proposal. If so, address these requests and hand-in the proposal again.

3 Registration

- Once your proposal has been accepted, register your thesis with our secretary right away. At this time, both topic, advisor and starting date are fixed.

4 Supervision

- You are responsible to schedule all meetings.
- Schedule regular meetings with your advisor to discuss your progress.
- Schedule milestone meetings with the professor around every second month. These meetings should consist of a short presentation with well-prepared slides, as well as meaningful results which show progress.
- It may be helpful to create short presentations for the milestone meetings. Send these presentations to the professor beforehand.
- The advisors will generally neither read drafts of your thesis, nor write or review your code.

5 Writing the Report

- Your report is the main document describing what you did in your thesis, and it is the main input for grading.
- Your report must be written in English using the provided L^AT_EX [template](#).
- Start writing early.
- Keep notes throughout.
- Discuss the thesis outline with your advisor.
- Include an abstract.
- The target audience for your report are people with a similar background in computer science. Do not repeat basic textbook material.
- Stay concise and to the point. As a guideline, write ≈ 50 pages excluding references (≈ 25 pages for bachelor thesis).
- Avoid low-level details (e.g., long code listings). Make use of an appendix for relevant additional material.
- It is recommended to read the relevant parts of “Writing for Computer Science” by Justin Zobel.
- Use examples and figures throughout.

6 Submitting

- Hand in your thesis in the secretary’s office. Make an appointment upfront.
- Hand in two copies of your report along with source code, data, and instructions for installing and running your code.

7 Final presentation

- If you want, you can present your thesis to the group.
- Whether or not you chose to present, as well as the content of your presentation, does not affect grading.
- We recommend a presentation before you hand-in so that you can incorporate any feedback that you may get.