Exposé Guidelines

For Bachelor's and Master's theses @ISE

Writing an exposé is a required step to receive supervision for a thesis from our team. Before you start writing it, we should have discussed and narrowed down the topic in an appropriate fashion (also depending on whether it is a Master's or Bachelor's thesis). The exposé is supposed to serve as a framework and summary of the intended thesis. At last, our final decision to accept supervising your thesis will be made based on it.

Below you can find some guidelines and remarks on what we expect from an exposé. Furthermore, we might provide you with good sample exposés from past theses (depending on your topic).

Notes on Writing an Exposé

An exposé is the first overall sketch of your thesis and demonstrates your ability to perform scientific work. The expected extent of your exposé depends on the supervisor, the complexity of your topic and your ability to write to the point – ranging from one short paragraph per aspect to a maximum of five pages overall. It should therefore be agreed upon with the respective supervisor.

As a general recommendation, your exposé should give a summary that includes the following five (plus one optional) aspects:

- Context: Explain the context and relevance of your topic, e.g., with a use case that motivates your work or by referencing related work (scientific articles and books, but also news reports, studies, etc.).
- Problem or research question within the context:
    - Point out the currently existing problem within this context that you want to address in your thesis. Why is this a problem? Why is it relevant?
    - As an alternative to a problem statement, you can formulate a research question that you want to evaluate in the context of your work.
- Solution idea/approach: Describe and structure the general idea/approach for solving or counteracting the identified problem. What is your idea/approach and what is the novelty in it? Why should it work? If you are not sure what approach or method could be applied, reading related work that tries to solve similar problems, might give you some inspiration for your own work.
- Aspired implementation: A prototype or implementation is an outcome of most thesis works performed at ISE (however, depending on your topic, this is not necessarily always the case). Describe how you are planning to implement your idea. What kind of technical outcome can be expected from your thesis? In what system context shall this result be applicable and how?
- Evaluation/assessment approach: Tell us how you are going to evaluate/assess your contribution. For example: compare quality aspects of your implementation with related implementations (performance, fault tolerance, security, …); compare features of your implementation with features of related implementations; show new capabilities that your approach enables. On which basis could an external evaluator decide whether (or to what extent) you solved the problem / answered the research question identified above?

- (Timeline: Give a brief timeline indicating how long you intend to work on what aspects of your thesis. What are the major milestones and when are you planning to reach them?)