

# Guidelines for Graduate Students doing a Thesis

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**Doing a thesis** to obtain a Masters/Ph.D. degree is time consuming and represents a significant intellectual challenge. However, a good thesis makes you a specialist, with rare and valuable expertise (an expertise that can be valuable to industry and academia). As such you will have access to better jobs and opportunities. Furthermore, students working on my research projects get exposed to practical issues and technologies that are relevant to today's software development challenges. I closely supervise thesis work to ensure that students are productive and successful.

**If you want to be my graduate student** here are a few things you should know about how I perceive thesis work. There are different ways to contribute to a problem in software engineering. Three dimensions can be identified:

- *Theory and Methodology*, e.g., define a new design methodologies, refine existing testing methodologies,
- *Tool support*, e.g., developing prototypes of test support environments, and use of those prototypes on case studies,
- *Empirical studies*, e.g., comparing testing methods on actual programs and faults,

Any thesis can contribute to these three dimensions in varying proportions. Depending on your strengths and preferences, you may focus on different aspects. But once you make the choice regarding the main contribution of your thesis, this is what you will be judged by.

## **I expect a number of things from my graduate students:**

- They should have an in-depth knowledge of the research literature in the domain of their thesis. Graduate students are responsible for knowing the research literature in the domain of their thesis;
- They should have a strong sense of initiative, learn how to defend their ideas and positions, and be able to build a structured argument for the decisions they make regarding their thesis. For instance, decisions need to be clearly justified;
- They should remain open-minded to other ideas and suggestions;
- They should plan their work carefully, define deadlines, and get organized.

It is also important to clarify that the success of a thesis mostly depends on the student: the student is the driving force of the thesis since the thesis is the student's, not the supervisor's. It is of her or his responsibility to find the time and energy and acquire the skills that are required to do what needs to be done to complete a thesis.

The more responsive you will be to my suggestions and requests, the more responsive I will be to the documents you submit to my attention.

Now that the points above have been clarified, I would be delighted to have you as a graduate student, given you have the required skills and I have RA opportunities on my projects. I have high standards. But if you do a good job, you can expect my full support to help you achieve your best and find interesting job opportunities, both in academia and industry.