

Master Thesis 2.0 Event Notes

Topic: Area of Interest

- Andreas: Concrete ideas (what you actually want to do). Choose topic rationally, topic should personally intrigue you.
- Rafi: International students have limit on time. 2-4 months, don't waste time on searching for a topic more than that. Academic novelty can play a role.
- Marcus: Idealistic (If you're not 100% interested but you should do it) because it's getting harder to find a research topic nowadays. If you don't have an idea, then try to reproduce an existing work.
- Suhita: There is no really a perfect topic. Spending time depends on you. Advisable to start search 1 semester prior.
- Gabriel: Motivation does not come from vacuum, It comes from involvement. Spend time to get into the topic. It depends on you how you do it.

Topic: Thesis in University or Company

- Gabriel: In companies the thesis may be a side idea like product of a project. Companies have real world problems to solve. Problems with Role of students has to make sure that research questions are being answered correctly. Playing the middleman, can be harmful if the communication is not clear, and the two ends are not well-committed and in sync. University sometimes can be generous to teach the skills needed for the research, but that is not always the case.
- Marcus: Sometimes they are formulating they have not more interest. You don't get freedom to search which you actually get in university. Tip would be to find a supervisor FIRST. Advantage of university is that more stuff can be done, because there are no restrictions.
- Andreas: University is more exploratory & Visionary. Student has to play the role of a middle-man between the university and company. Company projects can also be cancelled, due to any reason, which can be a problem for the student.
- Rafi: Companies may have an R&D unit which is dedicated to research. They will provide a project to implement, which can be a masters thesis. However, this is good for internships. Data publication/privacy issue. Doing master thesis at companies might not always result in a job.
- Suhita: There may be a difference of opinion in supervisor from the university and the one from the company.

Topic: Meeting supervisor's expectations

- Andreas: Require important technical skills e.g. deep learning. Admission criteria can be strict. People should know their topic well, and should have read about the existing research being done in the group.
- Marcus: Completion of courses might not be mandatory, if the student is able to formulate a research question based on their area of interest. You can only know the direction you want to move in, without knowing how to do it, and that is fine.

There may be a filtration method like programming test & interview's in order to test skills.

- Gabriel: First impressions are tricky. Students generally approach the faculty who they know. Communication skills and interest needs to be conveyed well in discussions.

Opinion from recent Grads.

- Rafi: Active supervision, progress reports, situation reports. It is not always possible to get a supervisor who is always deep into the same topic as you.
- Suhita: Supervisor should tell what is being done wrong. Students can get lost in the topic, can get into it too deep, pull back student if the task is not going in the right direction.

Topic: Experiences

- Gabriel: Documentation of the progress should be done very well. Mistake can be paralysis by analysis. Have someone (supervisor) to talk to, when you feel overwhelmed then plenty of networking opportunity. Start writing of the evaluation results early. Take comments from the supervisor as a constructive feedback to grow and improve. At the beginning of the thesis, the student might not feel ownership of the topic, but as time progresses, student should move towards ownership of the topic.
- Andreas: The students who need to be supervised less, who are already thinking about the problem well are generally well liked by the supervisors. Documentation of all the tasks done during the research period is very important. Use the chance to network with people during a thesis.
- Marcus: Communication should be proactive and clear, to ask questions to the supervisor. Don't make the communication too taxing on the supervisor by asking generic questions.

Opinions from recent Grads:

- Rafi: Active communication is very important. Don't approach the supervisor with a subordinate mentality, because you know more of what you can do. Feel free to ask why, feel free to give your opinion or options. Expect time delays, communication can also be asynchronous but should be regular.
- Suhita: Learning of interesting stuff. After you're done with the thesis, you will emerge as more confident, because you have done stuff single-handedly. Take time to learn if something is unknown. Be socially active, don't confine yourself to the house during the thesis period. Don't say yes if you don't understand something that the supervisor has said.