Thesis Projects @ IT department

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http://www.it.uu.se/student/thesis_project/master
Thesis Projects @ IT department

• What is a thesis project (and how to find it)
• Requirements to start a thesis project
• The specification
• Roles

• Assessment
  – Writing a report
  – Presentation and opposition
• Questions
Thesis projects can be done at
• a company or public body
• UU (IT-department or nearby)
• another university, possibly abroad

This organisation
• ”owns” the problem that you are to study (solve)
• provides the workplace and (daily) supervision
The thesis project is a course

- Course goals that are assessed by the university
  - The report must meet academic requirements
  - The project must make this possible

During the thesis project, you are a student

- Other roles replace the teacher role:
  - reviewer
  - examiner
  - supervisor
  - coordinator
Selected evaluation criteria

Scope and size
- 30 credits = 5-6 months (45 cr.)
- relevant for the study program
  - Computer Science / IT Engineer / Embedded / ...

Advanced level
- Builds on knowledge from courses on advanced level
- Integrates knowledge and skills from different disciplines
- The student has searched and embraced new knowledge
Selected evaluation criteria

• Problem (to solve or study)
  – described in a clear, practical and relevant way
  – clear motivation and context
  – divided into issues (questions, tasks)
    • are relevant to the problem described
    • can be evaluated

• Method (= what you do to solve it)
  – appropriate scientific method

It may be original scientific work – but that is not required
Thesis project goals

Student (and UU) goals
- Study a problem in depth
- Gain experience, learn
- Produce an approved report
- Pass the course within a reasonable time
- Produce a result that can be used in a job application
- Get a degree!

Employer goals
- Get the problem solved
- Get an insight in the problem
- Get a working system
- Make a prototype, separate technical documentation
- Finish the job within a reasonable time
- Hire the student, asap
- Hire the student, but not before the report is approved
How to find a thesis project (exjobb)

• WWW
  – IT department
  – companies
  – ...
• Contacts
  – Teachers
  – Guest lecturers
  – UTNARM
  – ...

• An advertisement is just that: It may say "exjobb", but
  • is it one?
  • is it a good one?
  • is it a good one for you?

• The advertisement is
  • not the specification
  • but it’s a starting point
See http://www.it.uu.se/student/thesis_project/master/specification

- Title (not too long – preliminary)
- Background: company, context, motivation
- Problem, and its issues (related work, references) related to which scientific area?
- Method(s): how to solve it - prototypes, interviews, ...
- Delimitations – what you don’t do
- Time plan (realistic; other courses, vacation?)
- Relevant courses (that you took)
Hand in (email to exjobb@it.uu.se (spec and transcript) and physical everything):

• Application (signed by you and by your supervisor)
• Specification. If the specification is not adequate we will reject the application. It is your job to write a good initial specification.
• Transcript of records (from Studentportalen)
• Certificate of attendance (from this meeting)
Roles and start process

Student
- Supervisor – ”owner” of the problem
- help with daily work

Reviewer
- lecturer at UU
- reviews content
- helps with report

Coordinator

Admin
- registration

Examiner
- (program director)
- examination of report
- and presentation
What is in a report?

- Motivation
- Background to project
- Methods and techniques used
- Relevant theory, research and development
- Description of own work
- Evaluation, Analysis, Testing
- Conclusions including future work

Write for a student at the same level of studies as yourself before beginning the thesis.
Assessment of the report

- Disposition and quality of expression
- Knowledge of prior work and development
- Technical content and complexity
- Elements of own work
  - elements of creativity (literally: what did you create?)
- Demonstrated depth of understanding
- Evidence of critical evaluation
- Guidelines for future work
- Conclusions, including objective reflections
Assessment – apart from report

- Midcourse meeting
  - Meeting with your reviewer.
  - context, background, methods, related work, discuss your writing plan.
- Opposition
  - critical assessment of other work
  - use this to think about your own work (in progress)!
- Final presentation
During the work

• Stay in contact with your reviewer
  – About once per month, ideally an email every week.
  – If problems (delays) occur

• Write continuously
  – Get feedback from reviewer

• Ensure academic standard on your thesis
  – Not always what an external company requests

• Finish it! Writing problems? Use the Language Workshop
  www.sprakverkstaden.uu.se