Path to Degree CPSC 699

Outline

- MSc
 - course work
 - write thesis
 - defend thesis
 - 2 year typical
 - 4 year maximum

Milestones

- MSc
 - course work
 - research
 - write thesis
 - defend thesis
 - 2 years typical
 - 4 years maximum

- PhD
 - Breadth requirements
 - course work
 - select supervisory committee
 - candidacy exam
 - written exam
 - oral exam
 - background and proposal
 - write thesis
 - defend thesis
 - 3-4 years typical
 - 6 years maximum

On to the defense

- complete research
- complete dissertation
- select examination committee
 - MSc
 - supervisor(s)
 - 1 departmental
 - 1 extra-departmental
 - PhD
 - supervisory committee
 - extra-departmental
 - extra-university

Scheduling the defense

- 4-5 weeks before defense
 - to Faculty of Graduate Studies deliver
 - names of examination committee
 - scheduled time
 - copy of dissertation
- 3 weeks before
 - dissertation in hands of examiners
- allow 8 weeks from completion of dissertation to defense

Defense format

- 15 minute presentation
 - rounds of questions
 - start with external
 - finish with supervisor
 - repeat until out of time (2hrs)
- committee deliberations (in camera)
- Result

What is a thesis

- A research claim that you support with evidence and argument
- Dissertation
 - a document
 - states thesis
 - presents supporting evidence and arguments

Thesis proposal

- requirement for PhD
- optional for MSc
- early draft of dissertation
 - state thesis
 - do not have to support, but
 - indicate how you will collect evidence

Elements (1)

- thesis your hypothesis or claims
 - Riesbeck suggest 6 categories
 - process X is a feasible way to do task Y
 - process X is a better way to do task Y than any previously known method
 - task Y requires process X
 - people use process X to do task Y
 - process X is a terrible way to do Y
 - people don't use process
 - must be a novel contribution for PhD

Elements (2)

- Motivation
 - why is it interesting to others
- related work
 - literature survey
 - summarize the work of others
 - organize
 - does not have to be exhaustive
 - should be representative

- focus on ideas, not technical detail
- add value with your organization
- a bad literature survey
 - a disconnected collection of paraphrased papers
 - no big-picture view of how they fit together

Elements (3)

- Approach
 - how will you gather evidence?
 - how will you test hypotheses?
- evaluation
 - what will your evidence look like?
 - how will you know if it is valid?

Elements (4)

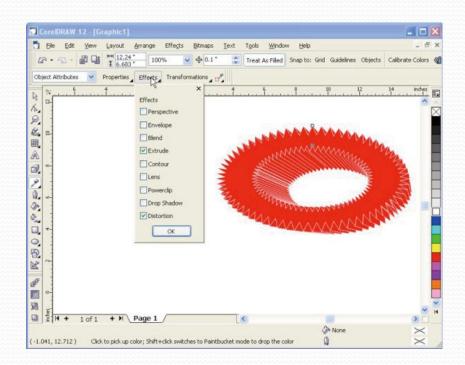
- work done
 - what have you accomplished so far?
 - good to have started work on collecting evidence
 - do not go too far
 - on PhD the proposal is your supervisory committee's first chance to give you feedback
 - helps convince
 - supervisor
 - committee
 - you

Elements (5)

- Plan
 - time line
 - allow time for
 - writing thesis
 - organizing defense

Suggestions

- find good drawing software
 - Corel Draw
 - Adobe Illustrator
- type-setting software
 - Latex
 - Ms Word
 - make sure you can get math/diagrams into document



Sources

- Saul Greenberg Chapter 1 club notes
 - Chris Riesbeck, What is a thesis defense?
 - http://www.cc.gatech.edu/faculty/ashwin/wisdom/what-is-a-thesis-defense.html
 - Cohen, Empirical Methods in AI
 - Jeff Boyd 699 notes