CSC 595

Starting shortly…

“there are two classic ways of doing a phd.

one involves knowing just what you are doing; you will then go through a clearly defined path, suffer occasional fits of gloom and despair, emerge with a phd, unless you do something remarkably silly or give up, and then proceed smoothly with the next stage of your career.

the other way is the one followed by most phd students, which involves stumbling in, wandering round in circles for several years, suffering frequent fits of gloom and despair, and probably but not necessarily emerging with a phd, followed by wondering what to do next in career terms.”

Marian Petre, The unwritten rules of phd research

today

- introductions (me and my research story, and you!)
- motivations and design of the course
- Github details

  ... all about expertise, expectations and a plan

- the graduate research seminar

  ... it’s all about differences:

  - research areas
  - culture
  - experience
  - expectations
  - abilities

General class structure

Expect a short break every 45 mins, and a long break (20 min) after 90 mins

Most days should end around 6pm

Come prepared to discuss the content - please do the readings

Guest speakers every other week or so

your instructor

- Associate professor of computer science
- research background in empirical software engineering, requirements engineering
  - Philosophical perspective is **pragmatic** and **constructivist**
  - Research strategies include **respondent**, **experiment**, **field studies**
- active in international research community (conference organization, journal editorialship)
- See neilernst.net

you!

- (Also send me an email or Teams message)
  - name and background
  - what do you want to get out of the course?

successful research

- a lot about thinking, analyzing, reasoning, writing proofs, designing experiments, analyzing data, writing papers (the daily grind)
- also a lot about getting your work accepted in the international community (networking, presenting, reviewing)

learning outcomes

- literature search and writing a lit review
- understanding a research proposal
- reading a research paper
- paper reviewing skills!
- disseminating your research (presentations, networking, collaborating)
- student-supervisor relationship management
- research ethics

MY EXPECTATIONS

Be interested and Participate. This is your chance to get a head start on your research

Class participation is graded and as important as the Lit Review Assignment

This is a reading/discussion/reflection course. Read, Discuss, Read, Reflect

DO NOT BE LATE TO CLASS!

Expected weekly workload: at least 2-3 hours of reading/writing outside the class

Have a Growth Mindset

assessment

- pass or fail
- Attendance is mandatory
- Class participation a must
- each course component: pass or redo
  - on a scale of: fail, unsatisfactory, **satisfactory, good, very good**
  - must redo every thing that is lower than satisfactory
- Feedback on class participation will be given right after reading break

What is Research?

- My view (pragmatic, remember)
  - answering research *questions.*
  - Uncovering new knowledge (**justified true beliefs**)
- What is the “justification” part? What do YOU accept as justification?
- What is your community’s notion of “justification”?

Elevator pitches

- See notes on Github