CS 5014: Research Methods in Computer Science

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An MS Degree in CS Research

- 3 semesters in technical writing
- 2 semesters in statistics
- Experimental design
- Oral communications
- Teaching
- Web design
- Professionalism
- Grant writing

(But we only have this course!)
Getting Started

The syllabus.
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The three topic areas:
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- Acculturation/Professionalism: How to thrive as a researcher
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- Statistics/Experimental design & analysis
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In addition, we will often encounter the following theme: How do you evaluate quality?
CS5014 Course Goals

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  - Paper writing (& reviewing)
  - Surviving (& and becoming successful) as a grad student
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Problem: The students in the class are very diverse!
Discussion Question

How do you decide if a piece of research work is good or not?
Career Options for Research

Job titles:
- grad student
- post doc (not so common in CS)
- faculty (beware issues of tiers, expectations, fairness)
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Fact: Most of you will not end up with a career in “research” (at least not in a narrow or elitist sense).
- But you probably will use a lot of the information covered here, even after you graduate.
Assignment

Look at these web documents:


- “How to do Research At the MIT AI Lab” edited by David Chapman http://www.cs.indiana.edu/mit.research.how.to.html

- “How to have a Bad Career in Research/Academia” by David A. Patterson http://www.cs.berkeley.edu/~pattrsn/talks/BadCareer.pdf