Research Methods in computer science
Fall 2015

Lecture 5

Omprakash Gnawali
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Agenda

HW2
Paper reviews
Assignment 3
HW2 - Research Formulation

What are you trying to do? Articulate your objectives using absolutely no jargon.

How is it done today, and what are the limits of current practice?

What's new in your approach and why do you think it will be successful?

Who cares?

Heilmeier
HW2 - Research Formulation

If you're successful, what difference will it make?

What are the risks and the payoffs?

How much will it cost?

How long will it take?

What are the midterm and final "exams" to check for success?

Heilmeier
How do the answers map to these questions to the different parts of a paper?
Anatomy of a Research Paper

Abstract
Introduction
Related Work
Design and Implementation
Evaluation
Conclusion
Critique

Critique is a method of disciplined, systematic analysis of a written or oral discourse. Critique is commonly understood as fault finding and negative judgment, but it can also involve merit recognition, and in the philosophical tradition it also means a methodical practice of doubt. – (Wikipedia)
Coping with Criticism

Keep it professional
Don’t take it personally
Understand it
Respond at the right time
Challenge as appropriate

http://ckscience.co.uk/candidate/career-zone/work-place-advice/5-ways-to-deal-with-criticism-at-work/

Do unto others as you would have them do to you. – (lots of places)
A Paper Review

“While the exercise is useful, the paper does not have any new concepts or implementation caveats that I think are worth publishing. All of the design description seems straightforward integration of existing systems. The evaluation is also very weak.”

--- excerpt from a review received by the instructor
A Paper Review

“Despite the limited practical applicability, I find the paper interesting for the sheer courage to try something out of the ordinary and to properly explore its limits.”

-- excerpt from a review received by the instructor
We looked at and discussed a few paper reviews received by the instructor.
Assignment 3

Find 10 papers related to your research project and show how they are related to your work and to each other.