# Research Methods
# in computer science
## Fall 2014

Lecture 3

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# Agenda

Critique

Types of papers

Assignment

# Conference Organization

## Different roles

General Chair

Finance Chair

Arrangement Chair

Technology Chair

Program Chair

Publication Chair

Technical Program Committee

## Schedule for activities

# 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

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."

# Communicating Research Outcome

Why is it important?

What is your proposal?

How is it better?

Prior work

Experiments

# Anatomy of a Research Paper

Abstract

Introduction

Related Work

Design and Implementation

Evaluation

Conclusion

# Research Formulation Recap

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

# Research Formulation Recap

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 to these questions map to the different parts of a paper?

# Types of Papers

Technical Reports
   Project description
   Research paper

Conference

Journal

Magazine


Find out what type your group and community writes.

# Which papers are more important?

Conference

Journal

Magazine

What makes a paper more important than others?

# Assignment 2

Research advance visualization in your field.

- Find at least 10 projects in your area of research.

- Find out how and what they advance.

- Come up with visualization to capture that information in a single graph