# 740: Computer Architecture Guidelines on Paper Reviews

Prof. Onur Mutlu
Carnegie Mellon University
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## How to Do the Paper/Talk Reviews

- 1: Brief summary
  - What is the problem the paper is trying to solve?
  - What are the key ideas of the paper? Key insights?
  - What is the key contribution to literature at the time it was written?
  - What are the most important things you take out from it?
- 2: Strengths (most important ones)
  - Does the paper solve the problem well?
- 3: Weaknesses (most important ones)
  - This is where you should think critically. Every paper/idea has a weakness. This does not mean the paper is necessarily bad. It means there is room for improvement and future research can accomplish this.
- 4: Can you do (much) better? Present your thoughts/ideas.
- 5: What have you learned/enjoyed/disliked in the paper? Why?
- Review should be short and concise (~half a page or shorter)

## Advice on Paper/Talk Reviews

- When doing the reviews, be very critical
- Always think about better ways of solving the problem or related problems
- Do background reading
  - Reviewing a paper/talk is the best way of learning about a research problem/topic
- Think about forming a literature survey topic or a research proposal

## Reading(s) on Refereeing CS Papers

- Smith, "The Task of the Referee," IEEE Computer 1990.
  - Provides an idea of the publication process
  - Provides guidance on how to perform technical reviews

#### Also see:

- Hill and McKinley, "Notes on Constructive and Positive Reviewing"
  - http://www.cs.utexas.edu/users/mckinley/notes/reviewing.html
- Levin and Redell, "How (and how not) to write a good systems paper," OSR 1983.
- Jones, "How to Write a Great Research Paper"

### Literature Survey

- More information to come... In the meantime:
- Read a lot of papers; find focused problem areas to survey papers on
- We will provide a list of project ideas and papers associated with them
- A good way of finding topics to survey or do projects on is:
  - Examining the provided project ideas and papers
  - Reading assigned papers in lectures
  - Examining papers from recent conferences (ISCA, MICRO, HPCA, ASPLOS, ...)

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