740: Computer Architecture
Guidelines on Paper Reviews

Prof. Onur Mutlu
Carnegie Mellon University
Fall 2013
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

  - 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”
  - 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, ...)

5