How to Read a Paper?

- Read the title, abstract, section headers, and figures
- Try and find slides or a video on the paper (these do not have to be by the authors).
- Read the introduction (Jennifer Widom)
  - What is the problem?
  - Why is it interesting and important?
  - Why is it hard? (e.g., why do naive approaches fail?)
  - Why hasn't it been solved before? (Or, what's wrong with previous proposed solutions? How does this paper differ?)
  - What are the key components of this approach and results? Any limitations?
- Skim the related work.
  - Is there any related work you are familiar with?
  - If so, how does this paper relate to those works?
- Skim the technical section.
  - Where are the novelties?
  - What are the assumptions?
- Read the experiments.
  - What questions are the experiments answering?
  - What questions are the experiments not answering?
  - What baselines do they compare against?
  - How strong are these baselines?
  - Is the experiment methodology sound?
  - Do the results support their claims?
- Read the conclusion/discussion.
- Read the technical section.
  - Read in “good faith” (i.e., assume the authors are correct)
  - Skip over confusing parts that don’t seem fundamental
  - If any important part is confusing, see if the material is in class slides or prior papers
- Read the paper as you see fit.

[source: Gregory Kahn]