# **Research Advising Documents and Wisdom Collected and Synthesized**

(systems and networking heavy!)

### John Wilkes, HP, CSP Project Startup Documents (1990)

http://www.cs.cmu.edu/~dga/15-712/S11/papers/Wilkes90.pdf

- Things to list out before pitching a new idea for a project
- Lists some of the key aspects everyone must think about before starting a new idea

## George H. Heilmeier, DARPA Director (1975-1977), The Heilmeier Catechism (~1977)

https://www.darpa.mil/work-with-us/heilmeier-catechism

- A set of questions when thinking about new programs at DARPA
- Similar to John Wilkes CSP doc above, lists key aspects to consider for new projects

### S. Keshav "How to Read a Paper" (2016)

https://www.synergylabs.org/yuvraj/docs/Keshav Fed2016 HowtoRead.pdf

- Proposes a multi-pass approach towards reading a paper.
- First two passes are needed for quicker reads, to get the gist of a paper.
- All three passes to be able to actually write a review and potentially re-create the paper
- Also has some nice follow on references of other sources to see

# Timothy Roscoe, "Writing Reviews for Systems Conferences", SOSP Shadow PC 2007 <a href="http://people.inf.ethz.ch/troscoe/pubs/review-writing.pdf">http://people.inf.ethz.ch/troscoe/pubs/review-writing.pdf</a>

- Nice collection of advice on the review process of a top-tier systems conference
- Meant to be written for Shadow PC members (i.e. students) so useful for new reviewers

## Simon Peyton Jones (MSR Cambridge), "How to write a great Research Paper", (2013?)

https://www.microsoft.com/en-us/research/academic-program/write-great-research-paper/30min version (https://sms.cam.ac.uk/media/1464870)

- 50min talk on 7 concrete suggestions on how to improve your research papers
- Seven simple suggestions: don't wait write, identify your key idea, tell a story, nail
  your contributions, put related work at the end, put your readers first, listen to your
  readers.

### Lin Zhong (Rice => Yale), "Tips to write Systems Papers", (2015)

http://www.linzhong.org/opinions/writing.html

- Some similar tips on writing papers, particularly for systems conferences.

### Henning Schulzrinne, Columbia, "Writing Style", (Updated 9/2020)

https://www.cs.columbia.edu/~hgs/etc/writing-style.html

and: "Writing Bugs" - https://www.cs.columbia.edu/~hgs/etc/writing-bugs.html

- Really nice collection of ideas and thoughts and additional references for writing styles
- Written for general technical writing, but particularly focused on systems and networks