From Posters to Papers

- Material adapted from Resources for EdTech Researchers IITB
  - http://www.et.iitb.ac.in/ForResearchers.html

- What is NOT a research paper?
  - One or more “obvious” solutions
  - A report on particular strategy
  - Use of an existing tool in a routine manner

What do paper reviewers look for

They look for…	**…so your paper MUST have**
Novelty	Analysis of prior work to show that your idea is unique
Positioning	Analysis to show your work is required and advances the state of the art
Soundness	Details of implementation steps
Evidence	Data to show your solution works as claimed
Coherence	Consistency between the problem, your approach, and your results

In more detail…

- At least ONE of these must be novel (strong → weak)
  - Your problem
  - Your solution (to solve a known problem)
  - Your domain (adapting a known solution to your context)
- A paper low on novelty can be strong if it is well-positioned
  - Analysis of related prior work to bring out gaps, AND
  - Analysis of papers that have a similar solution
- As NOVELTY decreases, POSITIONING ACCURACY must increase

Examples of "Related Work"

Mary Shaw, Writing good Software Engineering Research Papers, ICSE 2003

- The galumphing problem has attracted much attention [3,8,10,18,26,32,37]
- Smith [36] addressed galumphing by blitzing, whereas Jones [27] took a flitzing approach.
- Smith's blitzing approach to galumphing [36] achieved 60% coverage [39]. Jones [27] achieved 80% by flitzing, but only for pointer-free cases [16].
- + We modified the blitzing approach to use the kernel representation of flitzing and achieved 90% coverage while relaxing the restriction so that only cyclic data structures are prohibited.