Paper Types

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http://www.cs.ubc.ca/~tmm/courses/547-17F

Paper Types

Paper types

- each has different contributions, validation methods, structure
  - design studies
  - technique/algorithm
  - evaluation
  - model/taxonomy
  - system

http://ieeevis.org/year/2017/info/call-participation/infovis-paper-types

Paper types: Validation

- design studies
  - qualitative discussion of result images/videos
  - abstraction & idiom validation: case studies, field studies, design justification
- technique/algorithm
  - qualitative discussion of result images/videos
  - algorithm validation for algorithm papers: computational benchmarks
  - idiom validation for technique papers: controlled experiments
- evaluation
  - (controlled experiment as primary contribution)
- theory/model/taxonomy
  - *show power: descriptive, generative, evaluative, (predictive)*
- system
  - *show power for developer using system*

Paper structures

- typical research paper vs expectations for this course final report
  - more on implementation
  - novel research contribution not required

http://www.cs.ubc.ca/~tmm/courses/547-17/projectdesc.html#outlines

Reading visualization papers

- one strategy: multiple passes
  - title
  - abstract, authors/affiliation
  - flip through, glance at figures, notice structure from section titles
  - skim intro, results/discussion (maybe conclusion)
  - fast read to get big ideas
    - if you don't get something, just keep going
  - second pass to work through details
    - later parts may cast light on earlier parts for badly structured papers
  - third pass to dig deep
    - if it's highly relevant, or you're presenting it to class
- literature search
  - decide when to stop reading: is this relevant to my current concerns?

Literature search

- this course: I will give you seed papers during our 1on1 meetings
- forwards vs backwards search
  - Google Scholar forward citations!
  - only a subset of forwards & backwards citations will be what you need
- building up landscape
  - authors/affiliations will have more signal as you develop expertise