CS2125 Paper Review Form - Winter 2018

Reviewer: Mike Maksimov

Paper Title: Why Looking Isn't Always Seeing: Readership Skills and Graphical Programming

Author(s): Marian Petre

1) Is the paper technically correct?
 [ ] Yes
 [X] Mostly (minor flaws, but mostly solid)
 [ ] No

2) Originality
 [ ] Very good (very novel, trailblazing work)
 [X] Good
 [ ] Marginal (very incremental)
 [ ] Poor (little or nothing that is new)

3) Technical Depth
 [ ] Very good (comparable to best conference papers)
 [ ] Good (comparable to typical conference papers)
 [X] Marginal depth
 [ ] Little or no depth

4) Impact/Significance
 [ ] Very significant
 [ ] Significant
 [X] Marginal significance.
 [ ] Little or no significance.

5) Presentation
 [ ] Very well written
 [X] Generally well written
 [ ] Readable
 [ ] Needs considerable work
 [ ] Unacceptably bad

6) Overall Rating
 [ ] Strong accept (award quality)
 [ ] Accept (high quality - would argue for acceptance)
 [X] Weak Accept (borderline, but lean towards acceptance)
 [ ] Weak Reject (not sure why this paper was published)

7) Summary of the paper's main contribution and rationale
   for your recommendation. (1-2 paragraphs)

   The paper mainly explores the strengths and weaknesses of graphical representations
and compares them to textual ones. It puts forth and argues the statement that the
attraction to graphics is not matched by their performance. The author also underlines
the importance of secondary notation, as well as viewer experience and skill, for the
purpose of correctly interpreting graphical representations.
   I believe that the paper is well written and presented. It does not hold any deep
technical knowledge, but the idea it explores is still an important one. There are some
issues which I will bring up in the weaknesses section (correlation doesn't imply
causation), but overall, I believe this paper focuses attention to problems that might
require further research, and is a good first step in that direction.

8) List 1-3 strengths of the paper. (1-2 sentences each,
identified as S1, S2, S3.)

S1 – The paper states that graphics and text should be used in conjunction to complement each other, and that good graphics are ones that link perceptual cues to important information.
S2 – The paper makes a valid argument to showcase the importance of secondary notations in graphical representations, and that graphics not done correctly can be more damaging than helpful.
S3 – It is argued that a set of acquired skills and experience is needed for reading graphical representations. The reader must be able to correctly guide himself by the notations, and that graphics can prove to be more useful to expert users than novices.

9) List 1-3 weaknesses of the paper (1-2 sentences each, identified as W1, W2, W3.)

W1- The author didn't provide any detailed information on the experiments and evaluations he did to truly back up the negative claims he was raising towards graphical representations. Furthermore, as also stated in the paper, setting up a fair comparison between graphical representations and textual ones is no trivial task.

W2 – A big part of the paper was expert graphical readers versus novice ones. It was argued that graphics are more helpful to experts than they are for novices, contrary to popular belief. I believe too much significance was assigned to this as being a negative trait used to argue against graphics, since this holds true across the board. It is natural for experts in any field or activity to grasp and navigate through information much faster, whether textual or graphical.

W3 – Just because the author did not find any graphical representations that were superior to textual ones with regards to richness, does not lead to the idea that there cannot be such. As I said in W1, we do not know what kind of representations the author used and evaluated in his study, or their amount.