CS 6704: CTTC 8

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A systematic literature review of software visualization evaluation

On the whole I found the paper to be incredibly valuable. I have experienced the difficulty (and often lack) of evaluation in software visualization, so I can attest to the fact that the authors are dealing with a legitimate concern.

I thought the research questions were excellent, and very relevant. They were very specific and didn't seem to be there just to have research questions, which was a problem I had found in many previous papers.

I also found the paper to be very thorough. Even something as standard as the Related Work section, here, turned out to be one of the more comprehensive of the ones we've read so far, especially in terms of relevance to the work.

Rethinking User Interfaces for Feature Location

Once again, I found the related work section here to be very satisfactory. The tool and the research seem very useful, and I can definitely see myself using it. I didn't have enough time to see all the related work and see if what the authors did actually innovated above and beyond all the existing work or just extended it by a bit, so I cannot comment on that. However, from what work was presented, I was impressed and found the tool to do the job satisfactorily. The research questions also appeared to be good.

The only surveyed 18 people, however, which I did find to be a bit lacking, but I don't mark it as a major demerit to the paper.

RegViz: Visual Debugging of Regular Expressions

I found this paper to the most interesting of the group, because the non-formatting of regular expressions is something that has bothered me too and I've always wanted a better way of visualizing them natively. Usually you have to rely on third party tools so I was hoping that the techniques that the paper would be talked about could be somehow integrated into IDEs to help developers.

However, I don’t think the tool was actually that good. It works almost exactly the same way as existing third party tools and seems to be very primitive in the problems it solves. I think perhaps a better thing for them to have done is to generate sample strings that could be generated using the expression to make it easier to understand.

That being said, even this rudimentary formatting would be valuable to have natively in an IDE.

Visual Monitoring of Numeric Variables Embedded in Source Code

I do find the idea of the paper interesting, however I’m having trouble imagining this actually being used while developing production code. I can potentially see it being used to explain how slightly complex algorithms work in an academic setting to students having trouble following it, but apart from that I don’t see anyone realistically making use of this visualization, even if only because the problem it solves isn’t that hard in the first place. Even if we take their own examples, those could be solved using debug statements with minimal effort, and the time this visualization would save isn’t much.

I suppose if it were included natively in an IDE it would be a nice useful tool to have, just not one I see people downloading separately.