

Week 2 Seminar Facilitation --- 2105 at 10am to strategize

The Pixels	The Vertices
meet 10:15-12 --- Sem 2 E 2105	meet 10:30-12:15 --- Sem 2E 2107
10:15-10:45 - Start up & Sem w/ Judy	10:30-10:45 - Start up on your own with Facilitators
10:45-11 - on your own with Facilitators	10:45-11:30 - Sem w/ judy
11-11:30 - meet w/ Speaker	11;30-12 - meet with Speaker
11:30-12 - wrap up w/ Judy	12-12:15 - wrap up w/ Judy

here are some ideas to get the ball rolling with seminar. of course, you are welcome to implementing your own ideas....

1. Make sure that everyone is on the same page about what the thesis of the paper is. maybe have 1/3 of the class (round robin) articulate it, unless it becomes obvious that everyone has it (the underlying thesis or main point might be more subtle than the obvious one)....
2. Put together the argument that the authors make - maybe with the next 1/3 leading off? here, you might make sure everyone understands what is meant by the key insights....
3. take some technical aspect(s) of the paper and work on those - maybe in pairs? one idea would be to take something as simple as figure 1, and draw the structure of the program for specific inputs for x,y (say 3,2)...and all possible paths thru the program. figure how that maps to the nats. and how program termination is proven.
4. discuss a little more of the technical argument... to touch on some of the more difficult parts, as on pp 93-5
5. Significance - maybe the last 1/3 of the class (those who didn't respond for 1,2?) could talk about why all this matters today (the third paragraph of the assigned response writing question). how might the "further directions" pp 95-8 make a practical difference?
6. finally (for a more lively discussion?): consider where this was published. CACM. what kind of a journal/magazine is this? who is the audience? why would theoretical researchers publish here?
7. if the group comes back together after they have talked with byron, they might talk about that discussion.

Week 2, April 7:

1. **We suggest you read this article first** (it provides a gentle introduction to the more technical article by Byron): Gary Stix, [Send in the Terminator](#) – A Microsoft tool looks for programs that freeze up. *Scientific American* (Nov. 2006).
2. Byron Cook, A. Podelski, A. Tybalchenko, [Proving Program Termination](#). *CACM*, May 2011, 54-5, DOI:10.1145/1941487.1941509.

Response Paper Question (~1 page): In your first paragraph, clearly state: 1) the thesis about program termination made in both of the readings, and 2) whether you will argue for or against that thesis. In the 'body' of your paper, present an argument for or against. In your final paragraph, as a summary statement, articulate why it matters whether or not the thesis is true. In other words, why is Microsoft paying Byron the big bucks to do this work?

