

CS 524 S2015

VISUALIZATION & VISUAL ANALYTICS 2

Weekly Research Journal

You will maintain an online research journal that you will use to explore existing research topics in depth and to generate new research topics. Create a publicly available webpage or git repo (e.g., on github or bitbucket) where you will store your weekly writing and images.

1. Summarize, contextualize, and comment on at least 3 articles of your choosing each week (in addition to articles that I explicitly assign to you).

- Describe the CONTEXT of the paper. What problem does it explore? Why is exploring this problem important? Who does this problem affect? Who would benefit from reading this paper?

- What are the CONTRIBUTIONS of the paper? What specifically does it present that is new and interesting?

- Summarize the STRUCTURE of the paper. How do the authors present their ideas? What steps do they take to present their contributions and then convince you of the validity of these contributions?

- Discuss the RESULTS of the paper. What specific conclusions does it make? What advice does it give it to the target audience?

- What METHODS used to come to these results? Is it a user study, a survey, an interview? Does it use statistical analyses? Do the methods make sense for the problem? Is there anything that might have been left out? What assumptions did the authors make when they chose these methods? How many people were involved in the user study or interview? Do you think the addition of more studies would help convince you that their results were meaningful?

- What TECHNOLOGIES does the paper explore? Does the paper make sense only in terms of specific device or technology, or would the contributions of the paper apply to multiple technologies, or even future technology?

- Describe the FIGURES in the paper. Do they help explain the main ideas of the paper? Do any of the figures show some sort of interaction techniques? Could you redesign the figures so that they would be more useful or clear? What would the authors of the Sketching User Experiences Workbook say about them?

- List any words or ideas that you don't understand or that cause CONFUSION. Look up the meaning of these words. Do the references help you make sense of technical phrases or jargon? Provide the definition of the words that's relevant to the paper. If you can't figure it out, what is your best guess?

- How would you EVALUTE the effectiveness of this paper and the research it describes? How do you think the authors could build upon or improve the contributions of the paper? Is there anything that was left out? Can you think of future research that would build upon this paper?

- Explain the RELEVANCE of the article toward your research interests in general and especially toward the articles that you are writing in conjunction with this class. Before the mid-point of the semester, the

papers you choose should be important precursors that can be discussed in the “related work” section of your articles.

2. Each week discuss one workshop, symposium, or conference track related to visualization or visual analytics that took place in the last five years. What are the main topics that were explored there? How are these topics different from the main conference the event took place in? What was the quality of the papers? Do you think that important research was presented?

3. Develop new ideas that you think would make an interesting paper (or expand upon your previous ideas). Write about least 5 ideas per week. In as much detail as possible, describe them, sketch them, describe how you can interact with them. What do you find interesting and meaningful about these ideas? Why are they important? Who are they important to? What research communities would be interested in them?

Grading:

1. 15% of your final grade will be based on your research journal. Post a message to Piazza with the address of your webpage or git repo. You may be asked to discuss items in your journal in class.