CSC/SDS 235: Visual Analytics

Fall 2024

Mid-semester Project: Visual Analytics "In the Wild"

This is a group assignment (3-4 students) – I recommend choosing collaborators with complementary skillsets to yours!

Goals:

- Explore existing visual analytic systems
- Identify specific design choices, what shaped them, and the impact of them

Instructions

Visual Analytics systems are often designed for a particular application area (e.g. medicine, security, and even academic collaboration). The specifics of the data, discipline-specific context, and domain "norms" help shape the resulting system in interesting and sometimes surprising ways.

For this assignment, you and your team will prepare a short (~5min) presentation of an existing visual analytics system: who built it, who it was designed for, and how specific design choices shape the way the system works (or doesn't).

To start, choose an interesting-to-you visual analytics system. Some places to look are:

- IEEE VIS (Visual Analytics, Information Visualization, and Scientific Visualization)
 Conference
- IEEE Symposium on Visualization for Cyber Security
- VAST Challenge

Then, prepare a short (~5 minute) presentation of the highlights:

- 1. The Problem
 - a. You'll likely want to start by introducing the problem the paper is trying to solve, and any background info we need to know
 - b. If there's a particular use case for the system, or a particular persona the authors are designing for, this is a good time to talk about that too
- 2. New Idea
 - a. What's the new idea the authors describe in their paper?

- b. How does it compare with the "state of the art"? (at the time or writing, now, or both!)
- 3. Describe the System
 - a. How does the system work? What does it look like?
 - b. If the paper includes a demo video, you're welcome to sample it
- 4. Your Evaluation
 - a. What do you think of the solution the authors propose?
 - b. Did anything strike you as particularly clever?
 - c. Are there any major flaws in the approach?
- 5. Main Takeaway
 - a. What is the ultimate contribution this paper makes?
 - b. Did it solve the problem it set out to solve?

Sample slides (that you are welcome to use but do not have to use) are available on the course website.

Submission

Submit a PDF of your presentation on Gradescope before you present. How to submit as a group: https://guides.gradescope.com/hc/en-us/articles/21863861823373-Adding-Group-Members-to-a-Submission.

Rubric

The following matches the rubric you will see on Gradescope.

	Points	Criteria
	1	Submission is well-formatted and easy to read
	2	Speaking is clear and loud enough to hear
	2	All group members contribute to presentation
	1	Presentation includes the problem
	1	Problem is clearly described
	1	Presentation includes new idea
	1	New idea is well described
	1	Presentation includes a system description
	1	System description is clear
	1	Presentation includes an evaluation
	1	Evaluation is thoughtful
	1	Presentation includes a main takeaway
	1	Main takeaway is clearly described
TOTAL	15	