Course Review

CS 4460 – Intro. to Information Visualization
December 4, 2017
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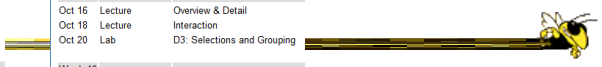
Schedule

Date	Session	Topic
Week 1		
Aug 21	Lecture	Introduction
Aug 23	Lecture	InfoVis Overview
Aug 25	Design	The Basics
Week 2		
Aug 28	Lecture	Multivariate Data & Tables
Aug 30	Lecture	Graphs & Charts
Sep 1	Lab	HTML & CSS
Week 3		
Sep 4		Labor Day Holiday
Sep 6	Design	CSV data
Sep 8	Lab	JavaScript
Week 4		
Sep 11		Hurricane Irma
Sep 13	Lecture	Visual Perception
Sep 15	Lecture	Case Study: Jigsaw
Week 5		
Sep 18	Lecture	Multivariate Visual Reps. 1
Sep 20	Lecture	Multivariate Visual Reps. 2
Sep 22	Lab	SVG
Week 6		
Sep 25	Lecture	InfoVis Systems & Toolkits
Sep 27	Lab	D3: Intro
Sep 29	Lecture	Tasks & Analysis
Week 7		
Oct 2	Exam	Midterm
Oct 4	Video	Value of Visualization
Oct 6		No Class
Week 8		
Oct 9		Fall Break
Oct 11	Lab	D3: Chart Types & Axes
Oct 13	Lecture	Geospatial data
Week 9		
Oct 16	Lecture	Overview & Detail
Oct 18	Lecture	Interaction
Oct 20	Lab	D3: Selections and Grouping
Week 10		
Oct 23	Lecture	Tufte's Design Principles
Oct 25	Lecture	Narrative & Storytelling
Oct 27	Lab	D3: Enter, Update, & Exit
Week 11		
Oct 30	Lecture	Hierarchies & Trees 1
Nov 1	Lecture	Hierarchies & Trees 2
Nov 3	Lab	D3: Animation & Transition 1
Week 12		
Nov 6	Lecture	Graphs & Networks 1
Nov 8	Lecture	Graphs & Networks 2
Nov 10	Lab	D3: Animation & Transition 2
Week 13		
Nov 13	Lecture	Text & Documents 1
Nov 15	Lecture	Text & Documents 2
Nov 17	Lab	D3: Layouts
Week 14		
Nov 20	Lecture	Casual InfoVis
Nov 22		Thanksgiving Holiday
Nov 24		Thanksgiving Holiday
Week 15		
Nov 27	Lecture	Time Series Data
Nov 29	Lecture	Visual Analytics
Dec 1	Lecture	D3: Maps
Week 16		
Dec 4	Lecture	Final review

Topic Review



Visualization Zoo

One example

Time series data
Index line chart
Stacked graph
Small multiples
Horizon graph

Statistical distributions
Stem-and-leaf plots
Q-Q plots
Scatter plot matrix
Parallel coordinates

Maps
Flow map
Choropleth map
Graduated symbol map
Cartograms

Hierarchies
Node-link diagrams
  Cartesian
  Radial (dendogram)
  Indented tree layout
Adjacency diagrams
  Icicle plot
  SunBurst
Enclosure diagrams
  Treemap
  Circle packing

Networks
Force-directed
Arc diagram
Matrix views

Heer, Bostock & Ogievetsky *CACM* '10

http://queue.acm.org/detail.cfm?id=1805128

Grades

- Components
  - HWs
  - Programs
  - Midterm exam
  - Final exam
  - Participation
- Everything will be in t-square
  - Do not go by its total percentage calculation (it's wrong)

Team Assessment

- Gathering them
- Only I will read these

P5 Projects

- I will try to make some of them available
  - May even show some at the start of the final

Exam

- Wednesday 13th 11:30-2:20 here
- Short answer (15-20 questions)
- Four styles
  - Concept (explain, compare, define, show, draw)
  - Code (D3 visualization)
  - Analyze and critique a visualization
  - Design a representation for data
- Assess the learning objectives

Class - Your Reflections

- How did things go?
  - Labs
  - Design
  - Anything else
- What were most interesting topics?
- What advice would you have for next time it is taught?

Course Survey

- Take a few minutes to complete CIOS/TAOS
  - Info: `https://www.assessment.gatech.edu/resources/cios/`
  - Actual Survey: `http://gatech.smartevals.com`
    (and from t-square homepage)

InfoVis Gospel

- Hopefully, course has increased your awareness of topic and you can become an advocate
- You have a great skill now!
- Keep me posted as your use these ideas in your career