DSBA 5122: Visual Analytics

Class 1: Intro to Visual Analytics

Ryan Wesslen

August 19, 2019

Welcome



About Me

- Associate Faculty Member in UNCC's DSBA Program
- PhD Candidate in Computing & Information Systems
- Data Scientist in Bank of America's Chief Data Science Org (NLP Team)

Introduce yourself

- Name
- What's your academic and professional background?
- Programming (e.g., R, python, JavaScript, SQL) & visualization experience (e.g., Excel, ggplot2, Tableau, Spotfire)
- What are you interested to learn more about data visualizations?

To do by next class: Send me an introduction email rwesslen@uncc.edu answering these questions. It's up to you on length. This is my chance to learn about your background.



DSBA 5122: VISUAL ANALYTICS

SYLLABUS SCHEDULE ASSIGNMENTS CANVAS RSTUDIO.CLOUD CLASS SLACK DATACAMP REFERENCE

DATA VISUALIZATION

THIS SITE CONTAINS the syllabus, schedule, and assignments for DSBA5122: Visual Analytics, held during Fall 2019 at University of North Carolina at Charlotte.

By the end of this course, you will become:

- 1. literate in data and graphic design principles;
- 2. an ethical data communicator;
- 3. a collaborative sharer by producing beautiful, powerful, and clear visualizations of your own data.





INSTRUCTOR

- Ryan Wesslen
- CenterCity

- Office Hours via Calendly

COURSE

- ☐ Mondays
- iii August 19 May 6, 2019
- **③** 6:00−8:45 PM
- **1** CenterCity 905
- Slack

https://dsba5122.com: Review the syllabus, schedule, and assignments.

Visualization Theory & Concepts

- What makes a good visualization?
- What are the best visualization tools for your problem?
- What human factors are important to consider in designing visualizations?

Data Visualization in Practice

- R: tidyverse: core data science for Exploratory Data Analysis (EDA)
- R: htmlwidgets: instead of JavaScript, D3
- R: shiny: instead of HTML/CSS/Server-side

Grading:

Assignment	Percent
Attendance & Participation	10%
4 Datacamp courses	10%
4 Problem sets	20%
4 Online Quizzes	20%
Group: Design Contest	10%
Group: Final Project	30%

Grading

Grade	Range
A (Comendable)	90% – 100%
B (Satisfactory)	80% - 89.99%
C (Marginal)	70% – 79.99%
U (Unsatisfactory)	< 70%

Policies:

- Quizzes cannot be turned in late.
 - DataCamp and Problem Sets get 50% penalty 1 day. 0% credit longer.
- Formal announcements sent thru email.
 - Informal announcements sent thru Slack.
 - Canvas will only be for assignment submission and tracking grades.

Policies

- Collaboration is encouraged (except quizzes)
 - Projects in groups of 3 (you select).
 - Problem sets can work in pairs.
 - Cannot work together on quizzes.
- RStudio.Cloud is available to run examples.
 - Students are encouraged (but not required) to learn to run locally.

Course Communication

For many students, a lot of the course material may be very new.

Many students' first reaction when get first R error message or question on programming is to email me.

When you have R/run questions:

- 1. Google it!
- 2. Ask a classmate.
- 3. Post your question on the course Slack channel. I'll likely answer it.
- 4. Email the TA, Tarun Sharma. Be clear and concise with your question.
- 5. Email me at last resort.

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Avoid saying: "I'm not a programmer/computer scientist/etc., therefore..."

Data Scientist Creed: If you don't know it, learn it.

Course Material

If you have course or personal questions (excuse absences, personal issues, etc.), that's when to email me.

Let's get started!

