HUDK 5053: FEATURE ENGINEERING STUDIO

9/8/16 9:01 AM

Today

- Course logic & structure

- What a lesson will look like

- Assessment

- What is a feature?

Syllabus

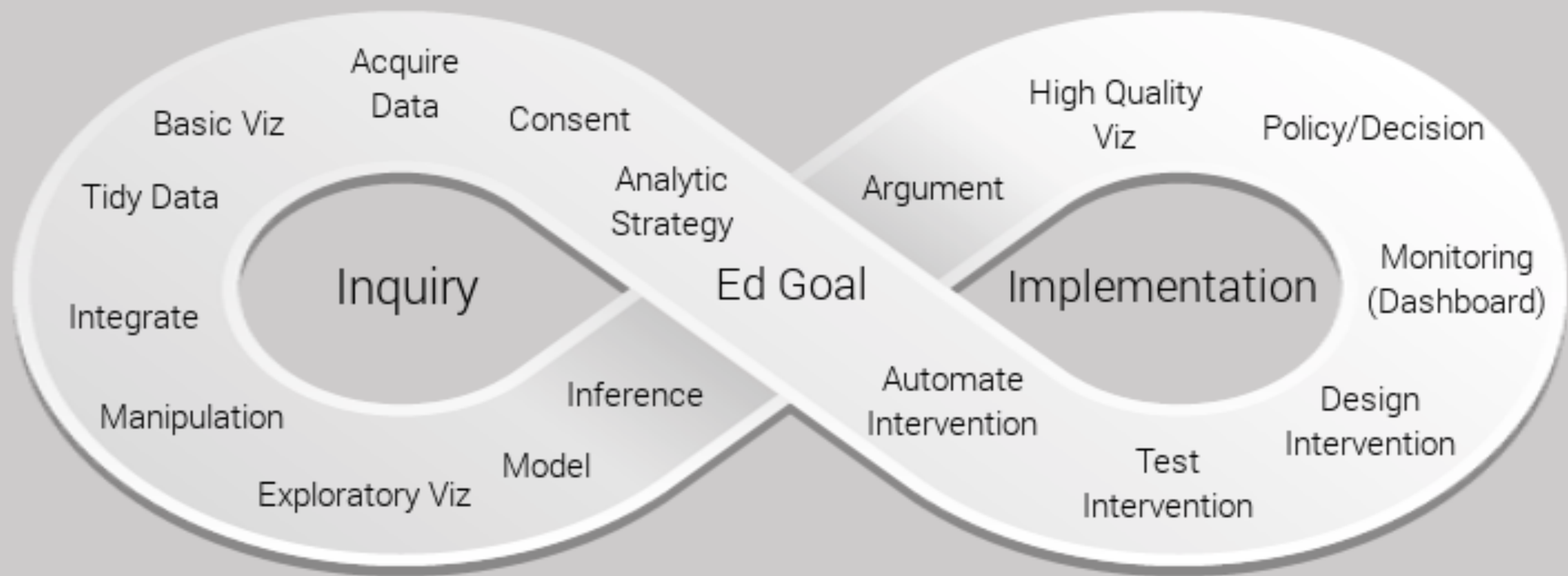https://github.com/feature-engineering-studio/syllabus

Course Logic

- Chance to develop a project

- Feed into the **capstone project**

- To demonstrate to people outside TC that you can do stuff

Course Structure

- Tuesdays/Thursdays (early 😭)

- Tuesdays - Introduce some idea/software

- Thursdays - Report back, problem solve

Ed Data Science Cycle

Assessment

- Workflow Milestones: 60%

- Progress Statements: 30%

- Participation: 10%

Assessment

Workflow Milestones:

1. Get set up: Github, RStudio(?), Zotero

2. Problem Design Statement

3. Data

4. Exploratory visualization

5. Method description

6. Progress statement

7. Logic model

8. Presentation

9. Deliverable

Assessment

Final Milestone:

- Submit whatever you develop

- Documentation (code, logic)

- Zotero library + notes

- Progress summary

Assessment

Progress Statements:

1. Each Thursday you report back: what your work is, what the obstacles are to you moving forward (Agile)

2. Keep a log of these work/obstacles

3. Submit as a progress statement

Tools

You will need:

- Access to a computer

- Twitter account

- The equivalent of:

  ★Github

  ★RStudio

  ★Zotero

Twitter (#TCLA16)

Three main uses for Twitter:

- Crowd source answers to your questions

- Comment on readings

- Backchannel in class (#IDKWGO)

- Create community amongst program

- Is the "coin of the realm"

Final Presentation

- Last week of class is Dec 20/22

- Presentations?

Questions?

What is a feature?

A feature is the specification of an attribute and its value (Kohavi & Provost,1998)

A feature is an individual measurable property of a phenomenon being observed (Bishop, 2006)

Is a feature a covariate?

Is a covariate a feature?

What features might be related to grades?

Assessment

Purpose of grades

- Not performance based

- Entirely a tool to overcome **immunity to change**

Assessment

Purpose of grades

- You will be assessed based on:

- Timeliness (5pm)

- Comprehensiveness

- Organization