



# CPSC 392

Chelsea Parlett-Pelleriti

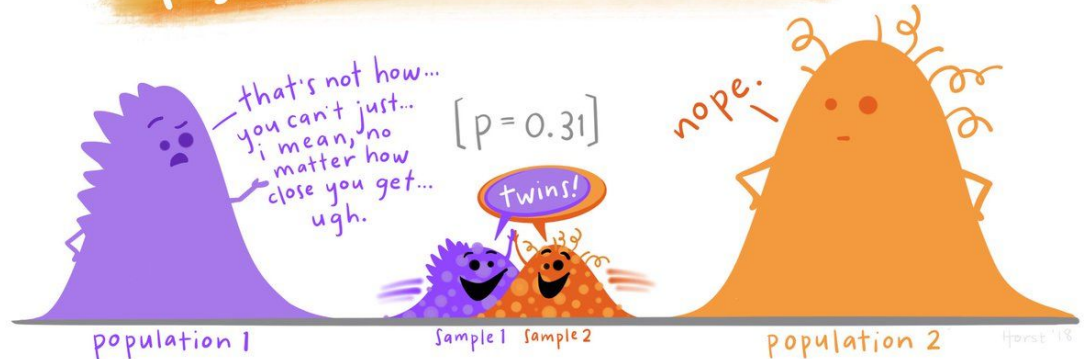


# Who is this person?

Prof. Chelsea Parlett-Pelleriti  
(she/her)



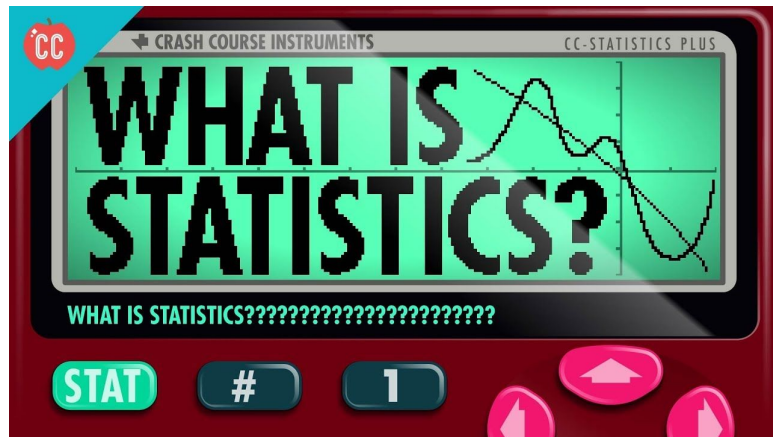
## TYPE II ERRORS:



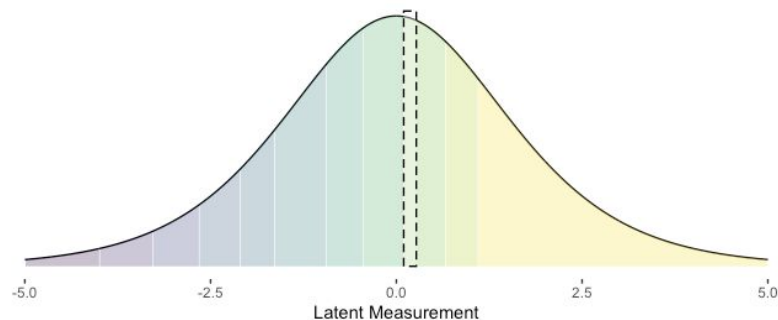
# Who is this person?



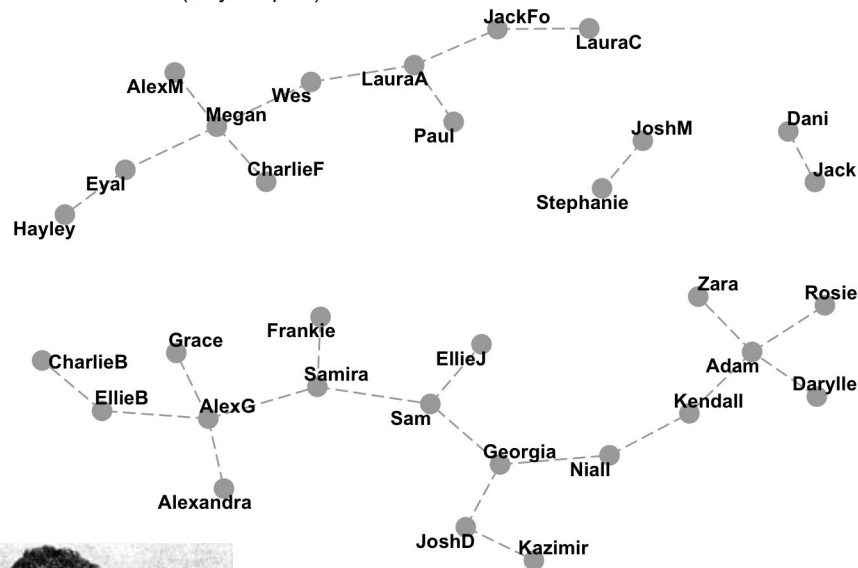
# Who is this person?



Cutoffs for Bet/JOL



Love Island 2018 (only couples)



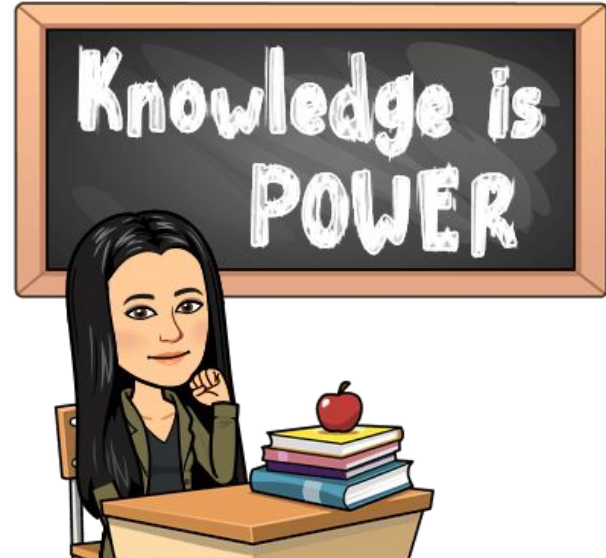
You?

# Course Admin



# Zoom

- Make your zoom picture you, or a Bitmoji of you
- Turn video on (optional)
- Use chat!



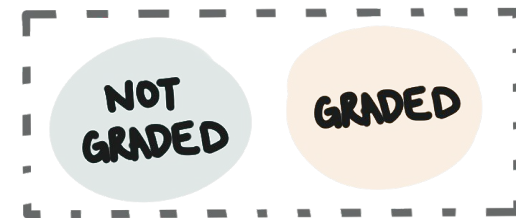
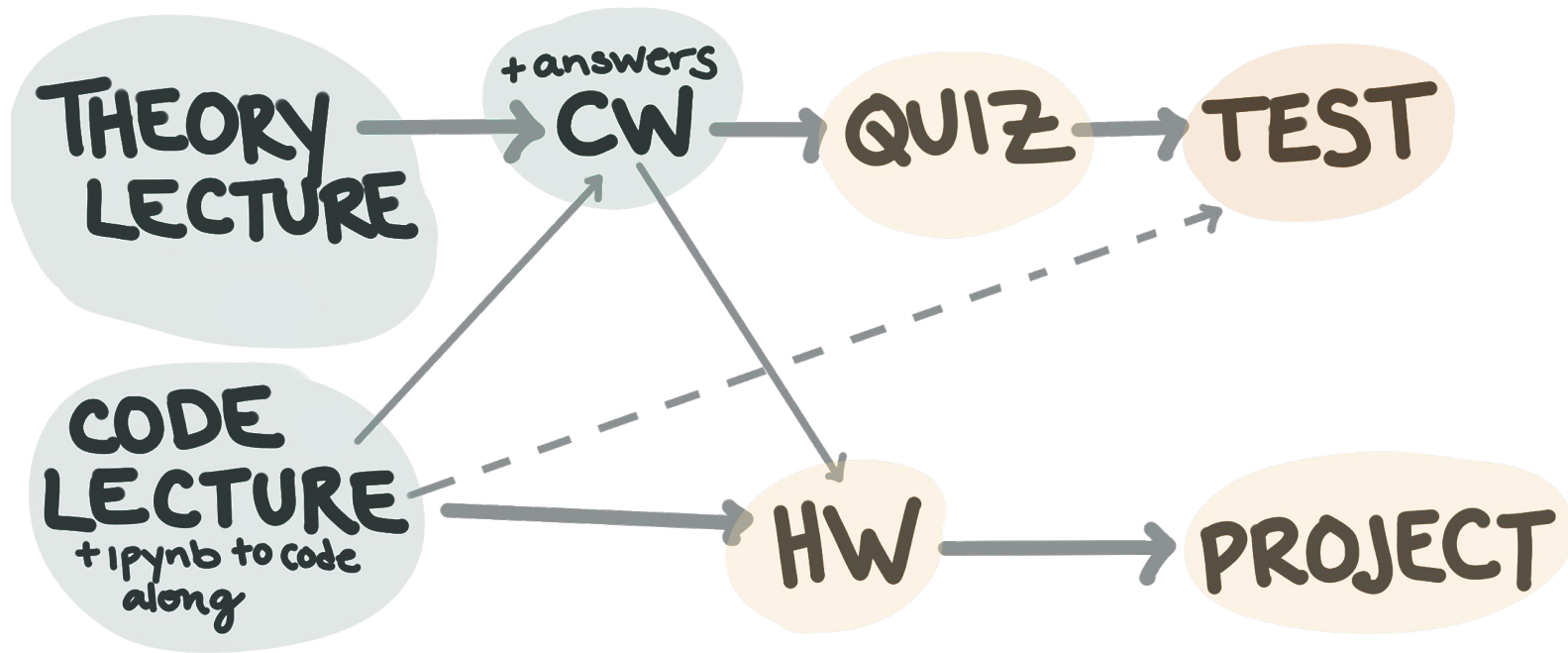
# What to Expect

- GitHub
- Slack
- Canvas
- Flipped Class
- In Class
- Weekly Quizzes
- Homework (4)
- Tests (2)
- Projects (3)
- Office Hours
- Content (we'll get to that in a sec)



# Grade Breakdown

- **Homeworks** (25%)
- **Quizzes** (15%; Weekly, drop 2 lowest)
- **Exam 1** (20%; Small Project + In Class)
- **Exam 2** (20%; Small Project + In Class)
- **Final Project** (20%; Project + Presentation)



## Week 1

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🔗 **Class 0 -- Introduction and Admin**

**Class 1 -- Debugging Basics**

- HW0 Due

## Week 2

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**Class 2 -- Labor Day**

**Class 3 -- All the stuff you need to know (Math)**

- Quiz

## Week 3

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**Class 4 -- All the stuff you need to know (Python)**

**Class 5 -- Visualization**

# Late Policies

- **Three** 24-hour extensions, no questions asked.
- You **MUST** inform me **BEFORE** the assignment/project is due (Google Form)
- **1.5% per hour (or partial hour) penalty.**

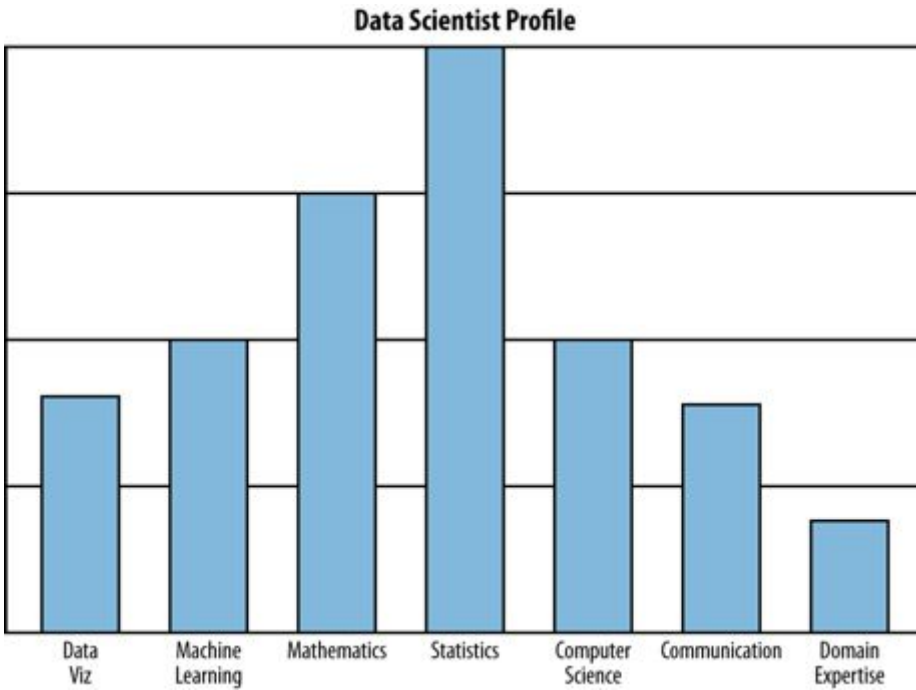
# Misc. Resources

- Chapman [Tutoring Center](#)
- [Test Anxiety](#)
- [StatQuest](#) Videos
- [Pandas](#) Tutorials
- [Plotnine](#) Tutorials
- [sklearn](#) Tutorials
- [Keras](#) Tutorials
- [Jupyter Notebooks](#) download
- [Machine Learning Flashcards](#) (Chris Albon)

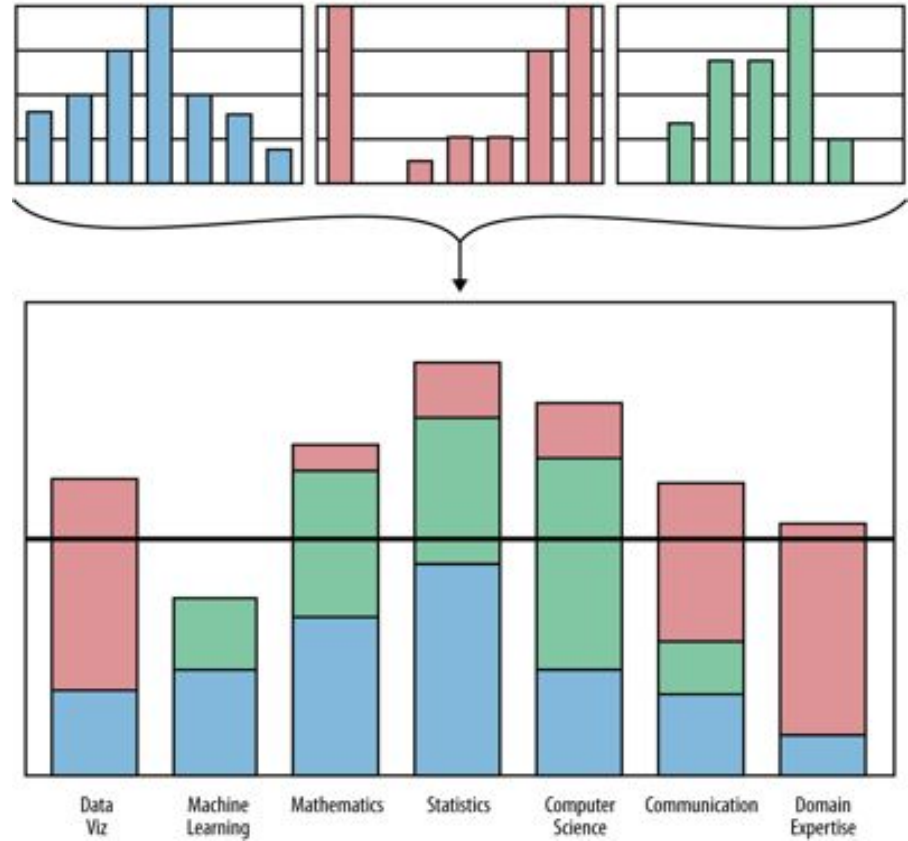
# What is Data Science?







No one person can be the perfect data scientist, so **we need teams.**



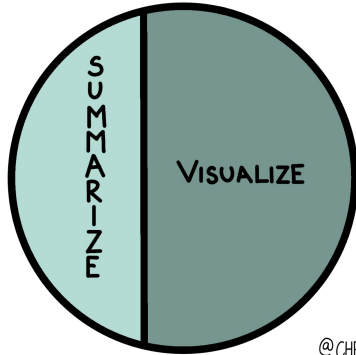
Source: Doing Data Science (O'Neil & Schutt, 2013).

# New York City Subway Diagram



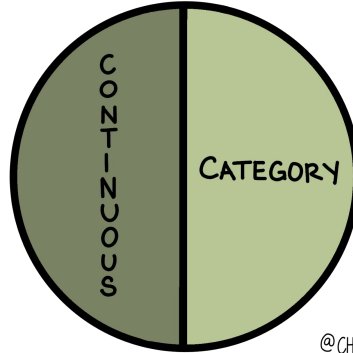
# Algorithms

EXPLORE



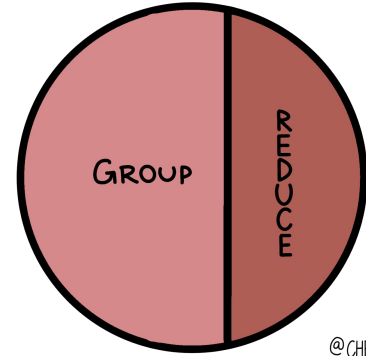
@CHELSEAPARLETT

PREDICT



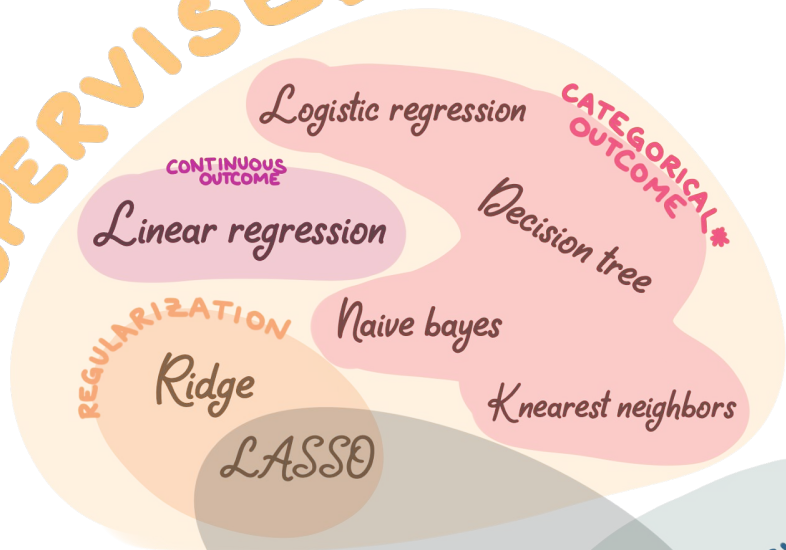
@CHELSEAPARLETT

SIMPLIFY



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SUPERVISED



LASSO

Ridge

REGULARIZATION

DIMENSION  
REDUCTION

PCA

CLUSTERING

DBSCAN

Hierarchical clustering

K-means

Gaussian Mixtures (EM)

UNSUPERVISED

# How does Data Science affect the World?

- Ethics
- Communication
- Diversity

Make sure you have python and pip installed!

Pip

Python

# FAQ

Study Guides | Classwork Answers | Feedback on work/Grading | When will lectures be up? | Using algos/methods we don't cover



AMA