DATA 8
Spring 2018

Lecture 1

Introduction

Welcome to Data 8

- John DeNero
- David Wagner
- Ani Adhikari

Course Website

http://data8.org/sp18

Data Science

What is Data Science?

Drawing useful conclusions from data using computation

- **Exploration**
  - Identifying patterns in information
  - Uses visualizations
- **Inference**
  - Quantifying whether those patterns are reliable
  - Uses randomization
- **Prediction**
  - Making informed guesses
  - Uses machine learning

Connector Courses

- Data science is driven by applications
- Every data-driven subject brings new challenges
- Connectors are small, independent courses taught by Berkeley faculty who are excited to share their expertise

http://data8.org/connector

DATA SCIENCE CONNECTOR COURSES

Companion Courses for Data 8

LEGALST 88
Taking Measure of the Justice System

STAT 88
Probability & Mathematical Statistics

COMPSCI 88
Computational Structures in DS

COGSCI 88
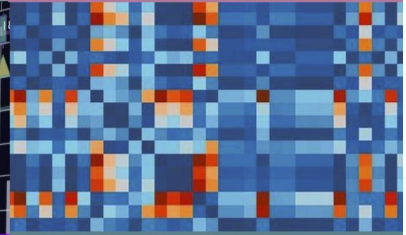Data Science & the Mind

PSYCH 88
DS for Cognitive Neuroscience

UGBA 96- 4 & 5
Data & Decisions

STAT 89A
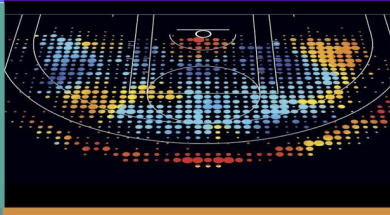Linear Algebra for Data Science

GEOG 88
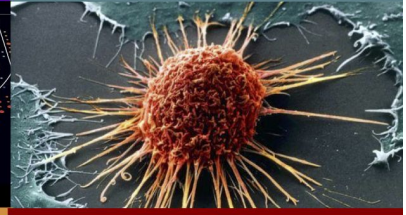Data Science Applications in Geography

L&S 88-1
Children in the Developing World

L&S 88-2
Sports Analytics

MCB 88
Immunotherapy of Cancer

Course Structure

Parts of Data 8

- Lecture has a screencast, but it's better to attend
- Participation grade: attend a substantial number of lectures
- Weekly lab assignments
- Weekly homework assignments & three projects
- (U)GSI office hours Monday-Thursday 11-5 (starts next week)
- Midterm during lecture hour on Friday March 9
- Final exam on Tuesday May 8, 3 pm to 6 pm

Details are in data.org/sp18/policies.html

Getting Help

- Ask a friend
- Ask on Piazza
- Come to office hours

Course Policies

Learning

Community

Course Staff

http://data8.org/sp18/policies.html

Collaboration

Asking questions is greatly encouraged

- Discuss questions with each other (except exams)
- Submit lab assignments individually; discuss in lab
- Submit homework individually, but feel free to discuss
- Submit projects individually or with a partner **from your lab**

The Limits of collaboration

- Don't share solutions with each other (except project partners)
- Copying or other dishonesty will result in failing the course

Example

(Demo)