## DSC96: Studio 1

**Introduction and Data** 

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- Assistant Teaching Professor at HDSI
- PhD from CSE at UCSD in 2019
  - Specialized in computer science education
- Worked at Princeton University 2019-2021
  - Taught introductory computer science course
- Mom of two children (one 2-legged and one 4-legged)

# You will learn what data scientists do And if you put effort into all the work, you will pass the course

- What kind of questions am I trying to answer to?
- How to collect the data I want?
- What kind of tool can I use for analysis?
- How can I present my results?

#### 4 assignments

- The schedule is on our git repo: <a href="https://github.com/snam0115/dsc96-fa21">https://github.com/snam0115/dsc96-fa21</a>
- Two of them requires you to submit a written report and/or deliver a short oral presentation
- One assignment will have peer-review process, during which you will review your classmate's report and provide feedback
  - I will evaluate the helpfulness of your feedback

#### You can work during class too

- I am going to call our class meetings "studios" as I plan to give you many inclass working hours
  - It reduces your workload and you will have me around to ask questions
  - Easier to find time to do the work with your partner

### Grading distribution

- Reading on Qualitative vs. Quantitative Research: 10%
- Open Coding Analysis Project: 25%
- SDPD Project: 25%
- Open-Ended Project: 30%
- Reviewing Peer's Report: 10%

#### Data science is everywhere

- Environmental Engineering
- Agriculture
- Business
- Medical Industry
- Transportation
- IT, Game industry
- Education

#### How did I get into data science?

#### **Data-Driven Education**

- How can we teach a large class better?
- You need a scalable way of keeping track of your students' progress
  - Use student data: iclicker responses, programming behaviors, in-lecture behaviors, tutor hour behaviors, note taking behaviors, etc.

#### Find a partner for the quarter

- Person who has some similar interest for the open-ended project
- Person who has mutual 1-hour slot to see me once a week outside the class
  - Monday / Wednesday