

# **You and Your Project Proposals**

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## **Learning goals:**

- **Get some tips for feasible and interesting project proposals.**
- **See some examples of interesting research questions.**

**COGS 108 Fall 2019**

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**Discussion 3**

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**OH: Wed 10-11a in SSRB 100**

# **Sam's Guide for a Good Project Proposal**

- **Find 3 interesting datasets.**
  - **I suggest looking at Data is Plural.**
- **Come up with 3 research questions for each dataset.**
- **Pick one.**
- **Why does this work? Quantity > quality for brainstorming.**

# How do I pick a research question?

- **Ask a question that would be interesting to a friend.**
- **Many good questions relate two quantities that are not obviously related.**
  - **Bad: What's the most common name in COGS 108?**
  - **Bad: Can you predict a person's sex from their name?**
  - **Good: Can you predict a person's age from their name?**
  - **Good: Can you predict a person's sex from the last letter of their name?**

**Fill out this form:**  
**[bit.ly/108-sam-names](https://bit.ly/108-sam-names)**

**Then, I have a demo:**  
**[bit.ly/108-sam03](https://bit.ly/108-sam03)**

(The demo is based off of Ch1 of the data science textbook I wrote: [https://www.textbook.ds100.org/ch/01/lifecycle\\_intro.html](https://www.textbook.ds100.org/ch/01/lifecycle_intro.html))

# **Example research questions I came up with last week:**

- **Have helmet laws reduced deaths for bike riders?**
- **What weather patterns are most associated with fires?**
- **What weather patterns are most associated with power outages?**
- **(It turns out PG&E is a scumbag company.)**
- **<https://simonwillison.net/2019/Oct/10/pge-outages/>**

**Rest of time:**

**Work on project proposals.**

**I will walk around and give  
feedback.**