CS 839: Foundation Models
~~Security, Privacy, Toxicity~~
Presentation & Project Info

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Announcements

- **Logistics:**
  - HW2 due Nov. 9. One more (small) homework after
  - Project info out. Dates: **Nov. 16**: proposal, **Dec. 19**
  - Presentation dates: **Nov:** 9,14,16,21,28,30 **Dec:** 5,7
    - Two slots/date (worst-case three might be needed in some special cases)
  - Due On **Nov. 2 (Today!)** --- presentation!

- Class roadmap: (note change!)

| Thursday Nov. 2	Presentation + Project Info
Tuesday Nov. 7	Security, Privacy, Toxicity + The Future

Presentation Hints: For Presenters

- **Why** did you select this paper?
- **How** does it fit into our class?
  - Example: studies PEFT variations
- **What** does it do beyond what other papers?
- What are the implications?
  - Who will care?
- What are insights beyond paper?
  - From you!
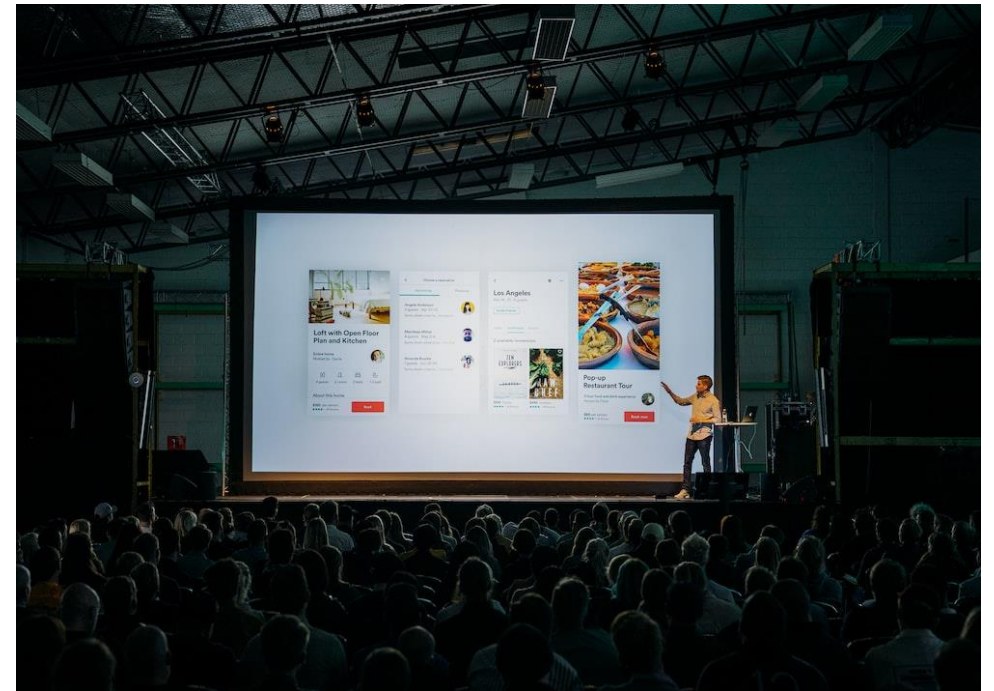
Presentation Hints: For Presenters

- What are insights beyond paper?
  - From you!
- This is the bit we're most interested in.
- Can describe flaws or limitations you've found
- Or new applications
- Or extensions
- Or inspiration you've gotten

- **Please have a few slides on this!**
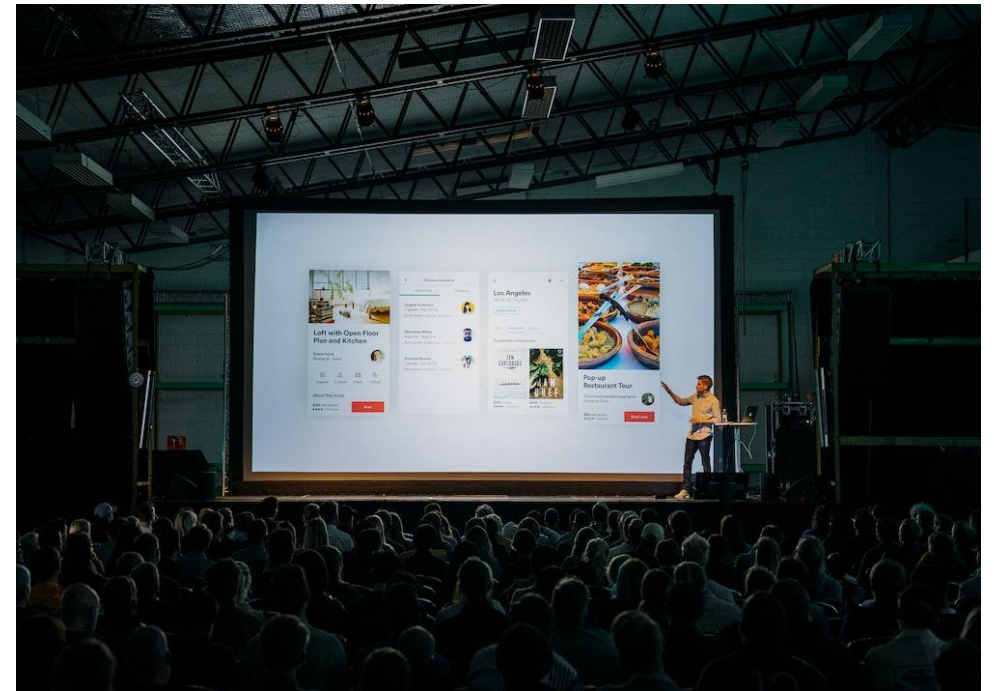
Presentation Hints: For Presenters

- Finally, we want to have audience engagement
- **Please take a minute to ask audience (and allow volunteers to answer)** **1-2 questions**

  - To gauge understanding
  - Or to drive a discussion forward

Presentation Hints: For Audience

Please engage & ask questions!

- We won't formally track this, but we are hoping for a conversation/discussion

- Obviously please attend.

- Rough goal: each of you please ask **two questions**!
  - Clarifying questions are fine

Project Hints

Your project should have the following:

- **Hypothesis (clearly state it!)**
- **Some means of verifying it**

- Contextualization for the work
- Related work
- Future work

Project Hints: **Writing**

Very generally, you can structure your report as follows:

- Also great for papers in general,
- Ignore parts that are not directly relevant

Tips for Writing Technical Papers

Jennifer Widom, January 2006

Here are the notes from a presentation I gave at the Stanford InfoLab Friday lunch, 1/27/06, with a few (not many) no revisions for the 10/19/12 revival. The presentation covered:

- Paper Title
- The Abstract
- The Introduction
- Related Work
- The Body
- Performance Experiments
- The Conclusions
- Future Work
- The Acknowledgements
- Citations
- Appendices
- Grammar and Small-Scale Presentation Issues
- Mechanics
- Versions and Distribution

https://cs.stanford.edu/people/widom/paper-writing.html

Project Hints: **Writing an Intro**

Intro can be challenging to write

- For your project report,

- Also for a paper

- Template is pretty good!
  - Answer each question with a bullet outline, then write

1. *What is the problem?*
2. *Why is it interesting and important?*
3. *Why is it hard?* (E.g., why do naive approaches fail?)
4. *Why hasn't it been solved before?* (Or, what's wrong with previous proposed solutions? How does mine differ?)
5. *What are the key components of my approach and results?* Also include any specific limitations.

Project Hints: **Writing Experiments**

Often challenging: structuring an experiment section!

- Hypothesis
- Proxy
- Protocol
- Expected Results
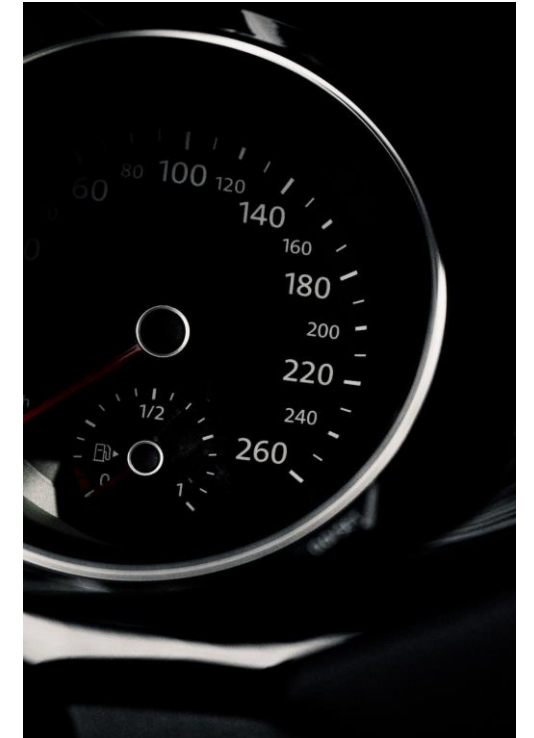- Results

How to setup an experiment

The Coffee Experiment!

https://aberger.site/coffee

Writing: **Paper Hints**

Beyond this class, one trick to keep in mind.

- Most reviewers not as knowledgeable as you are in your area
- Do not have access to a simple metric to evaluate your work

- **Provide it to them!**
- Otherwise, they will default to heuristics
  - Do you achieve SOTA?
  - Is the cosmetic writing/appearance good?
  - Other often irrelevant things

Thank You!