

Plan for Today 9/22

- Last-minute questions about Summary and Analysis Essay 1 — **due tonight by 11:59pm** on Gradescope.
- Reading assignment for next week.
 - No assignment due next week. Summary and Analysis Essay 2 will be due the following week, on Friday, October 6.
- Learning about LaTeX and BibTeX.

Summary and Analysis Essay 1: Due Friday 9/22

- You are to write a 400-600 word Summary and Analysis Essay about Katrina Ligett and Kobbi Nissim's *Communications of the ACM* article, “We Need to Focus on How Our Data Is Used, Not Just How It Is Shared”.
- Due: 11:59pm on Friday, September 22.
- Submission on Gradescope.
- See slides 5-8 of last week’s slide deck for your goals in writing this essay.

Questions?

Reading Assignment for Next Week

- Peter Denning's *Communications of the ACM* article, "The Smallness of Large Language Models".
- This will be the subject of your Summary and Analysis Essay 2.
- Due on Friday, October 6.

LaTeX Document Preparation System

- For your major paper, including the annotated bibliography and the draft paper, you will be using the LaTeX document preparation system.
- Most academic writing in computer science is produced using LaTeX (pronounced “lay-tech”).
- Unlike word processors, LaTeX is a “markup language”, in which the writer uses special syntax to describe the structure of their document, rather than its formatting.
- Such a description is created using a text editor, in a `.tex` file like `article.tex`.
- The LaTeX software is then run to turn the `.tex` file into PDF (e.g., `article.pdf`), interpreting the document’s structure according to the specified document style, which determines the fonts, page layout, etc.

BibTeX: LaTeX's Program for Bibliographic Citations

- LaTeX provides a program called BibTeX for handling bibliographic citations.
- When using BibTeX, one puts all of one's references in a `.bib` file, expressed in a formal syntax.
- Each such reference has a special tag (e.g., "Knuth86") associated with it.
- This tag can be used in a `.tex` file to create a bibliographic citation.
- Both the citations and the bibliography itself are formatted according to the selected citation style.

Using LaTeX and BibTeX: On Your Own Computer

- It is possible to download the LaTeX software to your personal computer and you may do this.
- See the link on the course website for information.
- This is, in my opinion, the nicest way to use LaTeX.
- You edit the source files using the text editor of your choice.
 - Emacs has a special mode for LaTeX.
- You run LaTeX from the shell, and view PDF files using whatever PDF viewer you like.
- On macOS, the Skim PDF viewer tracks changes to PDF files, redisplaying automatically.

Using LaTeX and BibTeX: Using Overleaf

- But the easiest way to get started with LaTeX is using Overleaf.
- All you need is your web browser.
- You upload `.tex` and `.bib` files to Overleaf, and edit them there.
- Overleaf runs LaTeX and BibTeX for you.
- You can then download resulting PDF files.

In Class Experimentation Using Overleaf

- Create an account on `overleaf.com`.
- Download the files `latex-in-CS115.tex` and `references.bib` from the course website or Piazza.
- Create a new project on Overleaf:
 - New Project => Blank Project.
- Delete the template `.tex` file.
- Upload our files `latex-in-CS115.tex` and `references.bib`.
- Click on `latex-in-CS115.tex`, and click “Recompile”.

In Class Experimentation Using Overleaf

- I'll give you a tour of our `.tex` and `.bib` files and their features.
- You can experiment, adding new text, and using the different features—and see the changes in the PDF.
- Figure out the LaTeX syntax for expressing:
 - “Here is a quotation inside quotation marks.”
 - It is possible—and I think more pleasant—to use L^AT_EX on your personal computer.
 - From 1993–2010, I lived in Manhattan, Kansas.
 - The word “wrong-headed” is *strange*!

In Class Experimentation Using Overleaf

- Go to `dblp.org`, and find the BibTeX entry for:
 - Logan Kugler's *Communications of the ACM* article, "Being Recognized Everywhere".
- Add this entry to your `.bib` file, add a citation to it in your `.tex` file, and check that it worked.

Questions?