Plan for Today 11/3

- (In Section B) Extra Class Presentations on Major Paper Topic.

- Review: Major Paper Scaffolding.

- Last questions about Major Paper Storyboard — **due tonight**.

- Assignment of Draft of Major Paper — **due 11/17**.

- Small group feedback on Storyboards.

Major Paper Scaffolding

- You will have five assignments culminating in your Major Paper:

  - Class Presentation

  - Annotated Bibliography

  - Storyboard — due tonight

  - Major Paper Draft — due Friday, November 17

  - Major Paper Final — due *Monday*, December 4

Review: Major Paper Storyboard

- Due tonight at 11:59pm.

- Structured as a sequence of slides, created in Powerpoint, Keynote, Google Slides, etc.

- Submitted to Gradescope as a PDF file.

- Consists of:

  - A summary of the topic and a thesis statement.

  - A sequence of *at least six* slides, each consisting of a single claim, supporting evidence for that claim, plus an explanation of how these relate to the larger thesis.

Storyboard Example

- To give you an idea what the topic summary, thesis statement and claims could look like, let's consider an example.

- But note that the example will not include the supporting evidence for the claims, nor discuss how the claims and supporting evidence relate to the larger thesis.

Exceptional Access: Topic

Our society depends on encryption to protect data both at rest and in transit, limiting access to that data to holders of the relevant decryption keys. However, the increasingly widespread use of encryption is making it more difficult for law enforcement agencies to investigate and prosecute crimes, and more difficult for intelligence agencies to prevent catastrophic events including acts of terrorism. This has led to proposals that such agencies be given "exceptional access" — or "backdoor" access — to encryption systems. However such proposals have been criticized by security experts for putting the security and privacy of computer systems at risk.

Exceptional Access: Thesis

Enabling Exceptional Access (EA) for authorized agencies is important for ensuring public safety, but previous proposals for implementing EA put personal privacy and computer security at risk. Instead we should work toward harnessing new advances in cryptography in order to implement EA in a way that protects system security and personal privacy.

Exceptional Access: Claims

1. Access to encrypted data can play a crucial role in preventing catastrophic events by enabling authorized agencies to identify and respond to potential threats.

2. Access to encrypted data can play a crucial role in allowing law enforcement to effectively investigate and prosecute crimes.

3. EA involves a risk of abuse by those with access to encrypted data, which can lead to violations of privacy.

4. Faulty EA mechanisms — including those proposed in the past — may be abused by unauthorized individuals or groups, compromising the security of digital systems.

Exceptional Access: Claims

5. EA should be subject to strict legal frameworks and judicial oversight to ensure that it is only used appropriately and does not violate privacy rights.

6. Although bad actors can always resort to using their own encryption software, granting EA to the default encryption mechanisms deployed by computer manufacturers will still provide benefits to law enforcement and intelligence agencies.

7. Ongoing research in cryptography suggests that EA may be implementable in a balanced manner that gives the government legitimate access, while preserving individual privacy and protecting computer security.

Exceptional Access: Claims

8. The implementation of EA should involve input and feedback from a diverse group of stakeholders, including civil society organizations and technology experts, to ensure that EA systems are designed in ways that balance the needs of government with personal privacy and computer security.

Major Paper

- Major Paper Draft due Friday, November 17, at 11:59pm.

- Your major paper will be eight–nine pages long (see below for the format) on a subject relating to computing and society.

- It should draw on six–eight sources, at least half of which should be scholarly (peer-reviewed journal or conference articles, or books).

- You will get feedback on your draft from me but also from two–three students.

  - Online signup sheet, for choosing papers to review.

  - Peer feedback due on *Wednesday*, November 22, and will be graded.

Major Paper

- Your paper must have:

  - a strong introduction and conclusion;

  - a compelling contestable thesis, stated clearly in the introduction;

  - good transitions;

  - thoughtful claims backed up with strong evidence;

  - proper use of quotes and paraphrasing with accurate citations; and

  - a complete bibliography.

Use of LaTeX and BibTeX

- Your paper must be formatted using the LaTeX template `latex-in-CS115.tex`.

  - Change the title and your name, and substitute your text for the example text.

- You will be building on the `.bib` file you created as part of your annotated bibliography.

  - The example `bibtex-examp.bib` shows how to use different kinds of BibTeX entries (journals, books, papers from conferences, miscellaneous documents).

  - Make sure each reference is correct and complete.

Use of LaTeX and BibTeX

- The template sets the font (12pt), margins and line spacing, and citation style.

    - Don't change them.

- Don't introduce extra page breaks or indent the first paragraph of a section.

- Make good use of LaTeX sections (see the template for examples).

    - Choose section titles carefully.

- Learn how punctuation marks are introduced using multiple characters in LaTeX (see the template for examples): "…", "-", "–" and "—".

Small Group Feedback on Storyboards

- In the remainder of the class, we'll divide into groups of three or four.

- Each member of the group will present their draft storyboard to the other group members, who will ask questions and make suggestions.

- Things to consider:

  - Does the topic summary or contestable thesis statement need work?

  - Does a claim lack evidence, or is the connection between a claim and the overall thesis unclear?

  - Are there missing claims?