EECS 325/425: Computer Networks
Project #1
Part A Due: September 26, 11:59 pm
Part B Due: November 28, 11:59 pm

Part of what we will talk about this semester are the *tradeoffs* involved in networking protocols, algorithms and systems. For this assignment you will be reading about, analyzing and critiquing some facet of networking. You will pick an article and write a report about the topic, as described below.

Part A: Choosing an Article

The first part of this project is choosing a suitable article, according to the following guidelines:

- Each student will choose their own unique article.

- Articles *must* be approved.

- Article source:

  EECS 325: The article can be from any popular technical media sources (e.g., Ars Technica, Wired, etc.). The project #1 web page will contain links to some popular sources of material as suggestions.

  EECS 425: The article must be from a high quality refereed conference or journal in networking (e.g., ACM SIGCOMM, ACM CoNext, USENIX Security, etc.). The project #1 web page will contain links to source of papers as suggestions.

- The article's topic must pertain to some facet of computer networking. This can range from networking hardware to cloud infrastructure to server software to network security and beyond. The article must have some obvious connection to networking (i.e., articles that are more generally about computing topics are not suitable).

- Articles must be submitted via Canvas before the "Part A" deadline. The submission must be a gzip-ed tar file called "*[CaseID]-proj1a.tar.gz*" and include (*i*) a text file called "README" that includes your name and Case ID, as well as listing the title, authors and URL of the chosen article(s) and (*ii*) the article(s) themselves in PDF format.

- You are encouraged to submit more than one article (in ranked order) in case your first choice has been taken by another student or is not suitable. While you may submit additional articles if your first choice(s) are not approved, you must submit an approved article by the "Part A" deadline to avoid late penalties. Therefore, submitting multiple articles is especially important close to the deadline.

- Note: Submissions will be processed relatively quickly after submission—i.e., not just after the Part A deadline. Further, submissions will be processed in the order received and therefore earlier submissions will have article preference relative to later submissions.

- Note: Deeper articles will make the second part of the assignment easier.

There are no points awarded for this part of the project, but late penalties will accrue for missing the Part A deadline for article submission.

Part B: Writing a Report

The second part of this assignment involves writing a report based on your chosen article. The report should contain three parts:

1. **Summary:** The first part of the report should dispassionately summarize the article, including all major points of the article.

2. **Critical Analysis:** Critically analyze the article, including both good and bad points. *For example:* What are the pros and cons of the technology (system, approach, policy, etc.)? Why is it useful? How might the technology make the world better? What are the unintended consequences? Why is the technology dangerous? Why should we be skeptical?

   Note: Better reports—that get higher grades!—will include deeper analysis.

   Note: This part of the paper is not simply about calling out pros and cons from the article itself, but about thoughtfully *analyzing* the article yourself.

   Note: As part of your analysis you may draw on material from additional sources, as long as you reference them and include a bibliography to the outside information in your report.

3. **Future Work:** Your report should give ideas and thoughts on how the technology being described could be improved and/or what additional uses the technology may have or lead to.

Format: There is no minimum page length or maximum page budget for your report. Further, the only formatting requirement is that you use a font size of at least 10pt.

Depth: The more depth your report goes into with respect to critical analysis and future work the higher your grade will be.

Writing: Clear and polished writing is required. Sloppy or incoherent English will lower your grade.

Submission: Your report must be submitted via Canvas before the "Part B" deadline. The submission must be a gzip-ed tar file called "*[CaseID]-proj1b.tar.gz*" and include (*i*) a text file called "README" that includes your name and Case ID, as well as listing the title, authors and URL of the chosen and approved article, (*ii*) a PDF version of the article you are reviewing called "article.pdf" and (*iii*) a PDF version of your report called "report.pdf".

Late Penalties: Late penalties for Part A and Part B will be summed to determine the overall penalty applied.