3/15/2020 Extra Credit

Extra Credit

Submit Assignment

Due Wednesday by 11:59pm **Points** 0 **Submitting** a file upload **File Types** pdf

This assignment is **optional** and worth up to 2.5 extra credit points (2.5% of the final grade). The course's final grades will be curved, but I will curve more generously if more students do the extra credit. This is **not** a group assignment.

This assignment will give you a chance to explore a topic of your own choosing by reviewing a recent research article.

Choose an article

Networking researchers share their work by publishing articles ("papers") in conferences and journals. These papers are peer-reviewed, and the best conferences and journals are very selective in what research articles they will publish.

Below are some recent conferences in networking that have published high-quality research results:

- SIGCOMM 2019 (http://dblp.org/db/conf/sigcomm/sigcomm2019.html)
- Networked Systems Design and Implementation (NSDI) 2019
 (https://dblp.org/db/conf/nsdi/nsdi2019.html)
- MobiCom 2019 (http://dblp.org/db/conf/mobicom/mobicom2019.html)
- Internet Measurement Conference 2019 (http://dblp.org/db/conf/imc/imc2019.html)

Choose an article from the above conferences. You can also look back at the same conferences in 2018 and earlier. The article should be 7 to 16 double-column pages. If it's shorter than that, then you're probably not looking at a full research article. There are many different topics covered, so keep looking until you find something that sounds really interesting.

Reserve the paper by entering your name and the paper title in the <u>reservation spreadsheet</u> (https://docs.google.com/spreadsheets/d/12BJHH1ModIX8FUA7kNseXfh00fg7DMm6RXVMmc7D1Pk/edit?usp=sharing). This is to prevent two students from reviewing the same paper. Search through the list before adding your entry.

Read and review

Read the paper. If the paper repeatedly talks about something that you don't understand, then do some more reading to gain the necessary background knowledge. Square brackets are used to refer to references (for example [3] refers to reference #3), and these are listed at the end of the paper.

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You may need to download and skim through some of these references to really understand the paper.

I want you to read your chosen article carefully and with a critical eye. Even papers at the very best conferences have flaws and one of your jobs as a reader is to find these flaws (so you can solve these problems in your next research project!). While you are reading, make notes to answer the following questions:

- 1) What is the main **research contribution**? In other words, what have the authors tried to prove or demonstrate in this paper?
- 2) What are the three most closely-related **prior research works**, and what do the authors do differently than these prior works?
- 3) Do a <u>Google Scholar (https://scholar.google.com/)</u> search for the basic topic of this paper. Which article is the top search result (the article on this topic with the most citations)?
- 4) What were the limitations of the experiment(s) described in the paper? In other words, how was their experimental setup different than a real-world network or system? Some of these limitations will be acknowledged by the authors. However, I also want you to think of shortcomings that were not mentioned in the paper.
- 5) What questions remain unanswered by this paper?
- 6) Are the research results reproducible? Did the authors release their data and source code? If so, where?
- 7) Are you convinced by the authors' arguments? Why or why not?
- 8) What would you like to see added to this paper?
- 9) Is the paper written for an academic or an industry audience? Which industry engineers (at which companies) would benefit from reading this paper?

Deliverables

Please submit a PDF review of the article, answering all of the above questions. Please include:

- The title of the article
- The authors of the article
- The conference where it was published
- The year of publication
- A hyperlink where I can download a PDF of the article.

Your answers to questions 1-9 above should be about two (carefully written) pages in total. The **quality** of your answers is more important than the quantity of text. Your answers should be written **in your own words**, not copy-pasted from the article.

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