

Homework #1 (CMSC 396H, Spring 2018)

Due January 31, 10:00am

1 Overview

The goal of this first assignment is to start laying the foundation of Computer Science research. We'll do this by starting to consciously think about how to **critically read** scientific papers.

2 Readings

Read the following articles. There are links to them on the course website's "Schedule" page:

- "How to Read a Paper", S. Keshav, In *ACM SIGCOMM Computer Communication Review*, Vol. 37 No. 3, July 2007.
- "All Your Contacts Are Belong to Us: Automated Identity Theft Attacks on Social Networks", L. Bilge, T. Strufe, D. Balzarotti, E. Kirda, In *ACM WWW*, April 2009.

Writing Task 1: Paper review. For future papers, you will be writing a concise synopsis of (and insight into) the work, but for this assignment, you will be doing a slightly more thorough review of the paper. The goal is to get you into the habit of thinking critically about the strengths and weaknesses of a paper. To this end, you will be writing your review of the "All Your Contacts Are Belong To Us..." paper in the template of what is common for *peer-reviewed* conferences and journals:

- **Paper Summary** (roughly one paragraph in length): A neutral description of the paper. Some common things to include in the summary: what problem does the paper seek to solve, how does it try to do so, what are some of the techniques it uses to evaluate or build the solution, and what are some of the main take-away results.
- **Paper Strengths** (itemized list of about one sentence each): What you think the contributions are; what you think the paper does right/well, or what you found interesting. Was it a good problem, a good solution, an evaluation rooted in a realistic setting, was the paper well-written, etc.
- **Paper Weaknesses** (itemized list of about one sentence each): What you think the paper did *not* do well.
- **Detailed Comments** (at a minimum, one short paragraph for each of the paper weaknesses): This is the part of the review that provides the rationale behind each of the items you listed as weaknesses of the paper. Why did you disagree with the problem, the solution, the results, how the paper described related work, etc. You can also add extra detail about why you *liked* aspects of the paper. What could the authors do to improve the paper to better meet your expectations—another experiment, more data, comparing to another setting, etc.

3 Submitting

You may submit through the class HotCRP site: <https://hotcrp.cs.umd.edu/396h>

HotCRP is commonly used for submitting and reviewing papers for conferences. We will use it as a sort of submit server: each assignment will be a “paper” and you will review each one. You cannot view other people’s submissions until you have submitted one of your own. After you submit, take a look at what others thought, mark ones you like as “good reviews.”

You may simply post your write-ups to HotCRP as reviews of “Homework #1”. In sum, you should submit a post that has a *total* of about two to three paragraphs. (It does not need to be very long; I’d prefer concise, thoughtful comments.)

These are due by 10am, Wednesday January 31 (the morning of next class), so that I can have time to read through all of them and discuss them during class.