

CS 444/544 Spring 2011 Lab 1: Ethics, legal issues, and human factors

Due: 31 January 2011

100 points

There is no writeup due for this lab, your only deliverable is a good 5-minute discussion about your paper on the 31st in class, but you will need to be well-prepared to get a good grade. It's likely I will ask you questions to see how prepared you are, particularly if the conversation you lead doesn't have a good focus and I feel like you're wasting the class's time. The discussion should be truly a discussion, you should spend no more than a minute or two talking yourself and try to spend most of the time on comments and questions elicited by you from your classmates.

The purpose of this lab is to get you to think more broadly about issues that can arise when doing research in the area of computer and network security and privacy. For example, there are ethical and legal implications any time you collect, share, transmit, or store certain kinds of information. Also, any time humans are part of the system to be secured or involved as research subjects, this introduces more things that need to be considered.

I've broken you up into groups of three, your group will lead a 5-minute discussion on the paper I've assigned you. Don't just read the paper, though, you should be doing some other research to provide context. For example, for at least one of the papers someone was arrested later on for carrying out something described in the paper. You should know the context of your paper.

You'll need to read things other than your paper, too. Particularly, if there's some background that you need, let me know and I can suggest other readings that will help you understand the one you've been assigned. Also, everyone should read chapters 1, 2, and 3 of Ethical Hacker's Handbook: 2nd Edition before the class discussion. For many of you one of these chapters will be very relevant to your paper. Please also read the abstract and skim the paper for the other 8 papers (the ones you're not assigned) before class on the 31st.

You should meet outside of class several times to discuss the paper with your group. Here are some questions to consider:

1. Did the authors of the paper potentially violate any laws? Think about how they collected their data, how they stored it, how they released it, and any other considerations.
2. Do the authors make any assertions or claims in the paper that they're perhaps not qualified to make? Is this sometimes okay? Sometimes necessary?

3. Do the authors make statements that are perhaps based more on their personal and political views than on hard science? Is this sometimes okay? Perhaps unavoidable?
4. If the authors didn't carry out the attacks they describe, do they have other obligations? For example, should they have pursued ethical disclosure differently? Should they have added a warning in their paper that a particular activity they describe how to do is potentially illegal?
5. Are humans part of the system that is described? How can differing levels of technical sophistication, motivation, etc. affect their role in the system?
6. Did the paper include too much detail about how to carry out an attack? Or, perhaps, not enough detail? Is not enough detail ever an ethical issue, or just a technical one?
7. Even if they didn't violate any laws, did the authors perhaps do anything that some would consider to be a violation of privacy?
8. How did the authors handle containment? If a mistake had been made by, for example accidentally connecting two networks, or something out of the author's control had happened like a machine being taken in a burglary, could the authors have had a much bigger problem on their hands than they had bargained for?
9. Should new laws or regulations be created in response to the paper?
10. What did the authors do right? Think about how they handled things like ethical disclosure and data storage, and what we can learn from them about how to deal with these various issues.

Please remember that many online conversations such as CS dept. mailing lists are publicly viewable. We should be critical of all of these papers, but keep in mind that the authors are real people with web browsers that might take offense to certain statements. Try not to post anything publicly that you wouldn't say directly to the authors, and the same is probably a good rule of thumb for the spoken class discussion as well.

Your grade will reflect how prepared you are as a group to lead the discussion. I reserve the right to quiz individuals on specifics from the reading and assign you a different score from your groupmates depending on the answers, though. For this lab, you may discuss the assignment in as much detail as you want with anyone you want.