COS 140: Foundations of Computer Science

Privacy and the Internet*

Fall 2018

^{*}Most of this lecture has been taken from *Computer Ethics* by Deborah G. Johnson and *The Unwanted Gaze* by Jeff Rosen

Homework

Homework

Ethics and the Internet

An Ethical System

Professional Ethics

Privacy and the Internet

Privacy and the ACM Code

- Slides online, homework on Blackboard
- Homework due 12/14
- Final exam: Wednesday, 19 Dec, 9:30–11:30



What is "ethics"?

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- Ethics
- Internet

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- Also "ethic" see dictionary for formal difference between "ethic" and "ethics"
- From Merriam-Webster online (modified slightly):
 - the discipline dealing with what is good and bad and with moral duty and obligation
 - 2. a set of moral principles: a theory or system of moral values
 - 3. the principles of conduct governing an individual or a group (e.g., professional ethics)
 - 4. a guiding philosophy
 - 5. a consciousness of moral importance
 - 6. a set of moral issues or aspects (as rightness)



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- Ethics are important in all aspects of life
- The Internet is still relatively new what about ethics there?
- Same basic principles as for any kind of ethics.
- But the Internet:
 - Makes some things more prevalent
 - Makes some things much easier to do
 - Puts some things in the hands of non-experts



Ethical systems

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- Ethical systems
- Utilitarianism
- Calculating Good in Utilitarianism

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- Philosophy has developed many ethical systems: Kantian, Utilitarianism...
- So has religion
- People tend to subscribe to one or more as suits their temperaments and beliefs
- Here, we'll just look at one: Utilitarianism
- You should be able to make utilitarian arguments even if you use a different methodology



Utilitarianism

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- Basic idea: Do the thing that provides the greatest good to the most people
- Must maximize good, not just make some people more happy.
- Rules are good to help make quick decisions or decisions without a lot of knowledge, but should be broken when have evidence that greater good can be created
- Decisions require knowledge of empirical facts, so different utilitarians may make different decisions



Calculating Good in Utilitarianism

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- Time of happiness does not matter (except for evaluating risk of not having the happiness).
- Take into account all consequences (not just immediate ones).
- Unhappiness must be subtracted from happiness.
- Person making decision is disinterested:
 - Not enlightened self-interest.
 - Not altruistic ethics.
 - Definitely *not* Rand's rational selfishness (Objectist philosophy)
- Could conceptualize using veil of ignorance (e.g., Rawls)



Professional Ethics

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Professional Ethics

ACM code

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- Code that dictates how members of a certain profession are to behave.
- May or may not explicitly be based on a formal ethical system –
 but utilitarianism is often a strong component
- Often, one can be removed from the profession if the code is not followed.
- Helpful because groups of experienced professionals have considered difficult ethical issues before the situation arises for you.
- Need to practice ethical behavior in "little" decisions so it is easy to do when there are "big" decisions.
- There may be conflict between guidelines in a particular situation.
- Does not necessarily reflect an individual's personal ethics.



The ACM Code of Ethics

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ACM code

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- ACM (Association for Computing Machinery) one of the two major professional organizations for computer scientists.
 - The other: IEEE (Institute of Electrical and Electronic Engineers)
 - Student ACM chapter here
- Following code is "required" to be a member of the ACM
- May be required for licensing in the future.



Privacy and the Internet

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- Traditional Thoughts
- Internet
- Utilitarian argument
- Individual benefits
- Gov./Companies
- Society

Privacy and the ACM Code

- Let's examine one ethical dilemma brought up by the Internet:
 Privacy
- When studying this: bring to bear ethical systems, codes of ethics



Some Traditional Thoughts about Privacy

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- Information about me is mine to share as I choose.
- Only necessary information should be collected about me.
- Information about me should only be used for what it was collected for.



Why is privacy an issue with the Internet?

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Privacy and the ACM Code

- Information can be easily collected and stored in data bases.
- Information can be easily sorted and collated.
- World Wide Web use (browsing behavior, shopping behavior, etc.) can be easily monitored and the data can be stored.
- Information sources can be easily found using searches.
- Information can be easily moved from one place to another.
- People have very little control over personal information if they
 want to fully participate in society (use credit cards, telephones,
 the Internet, drive, health insurance, etc.)



Utilitarian Arguments about Privacy

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- Has to be in terms of greatest good
- Two positions:
 - Benefits of privacy to individuals are outweighed by benefits to everyone – individuals, government, and corporations – when government, corporations can collect and share information about individuals
 - 2. The opposite is true
- To evaluate, have to look at the benefits and disadvantages to stakeholders



Benefits to the individual

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Privacy and the ACM Code

- Some consider privacy to only be important if one has something to hide, but...
- Allows relationships built on trust and intimacy.
- Important for democracy because it allows people to become independent thinkers and actors.
- People cannot be autonomous without privacy and autonomy is often considered fundamental to what it is to be human.



Benefits to corporations and government

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- Protection for individuals.
- Cost savings by corporations which are passed on to clients or customers.
 - Indirectly, through prices, or...
 - Consumers can "sell" their private information by "registering" to get savings.



Benefits to society as a whole

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- Thinking about society reframes argument tips the scales toward defending privacy.
- People change behavior if they believe they may be observed:
 - Not always changed from illegal or unethical activity.
 - If believe behavior is private, may:
 - Try new things.
 - Express new ideas.
 - Act unconventionally.
 - Protection from the "unwanted gaze" allows spaces in which people can operate in a particular context.
- Freedom is critical to democracy.
 - Diversity of ideas keeps democracy vigorous.



Privacy and the ACM Code

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Discussion

Respect the privacy of others. It is the responsibility of professionals to maintain the privacy and integrity of data describing individuals. This includes taking precautions to ensure the accuracy of the data, as well as protecting it from unauthorized access or accidental disclosure to inappropriate individuals.



Ethics of Current Issues

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- Data breaches: New: Marriott, Quoria; old: Target, Equifax, . . .
- Election interference
- Limits of online free speech (e.g., Tumblr, China, hate speech, doxing)
- Spread of (real) fake news
- Cyber warfare
- DNA testing kits, other health information sharing/privacy
- Hacking vs cracking

