

Virtual Undergraduate Town Hall FAQ
Privacy in Today's World
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Privacy in Today's World

How can we define privacy preferences across the population?

- People have a wide variety of privacy preferences, driven by personal feelings, upbringing, culture, and other factors. One useful set of privacy preferences were categorized in 1996 by Alan Westin:
 - **Privacy Unconcerned:** Have little concern about giving their personal information to businesses or to government, don't see the need for privacy-protecting legislation, and can't be bothered to debate privacy issues.
 - **Privacy Pragmatists:** Weigh the benefits against the risks of providing personal information before deciding if they have a privacy concern.
 - **Privacy Fundamentalists:** Place very high value on their right to privacy, reject the need for consumers to supply personal data to businesses, reject the notion that consumers want to trade their personal information for personalization, and are in favor of strong legislation to protect privacy.

What is PII?

- Personally Identifiable Information (PII) is a concept frequently used in information security and privacy laws to describe information that can be used on its own or with other information to identify a person. For example, the US National Institute of Standards and Technology ([NIST](#)) defines PII as "any information about an individual maintained by an agency, including (1) any information that can be used to distinguish or trace an individual's identity, such as name, social security number, date and place of birth, mother's maiden name, or biometric records; and (2) any other information that is linked or linkable to an individual, such as medical, educational, financial, and employment information." However, it has repeatedly been demonstrated that simple removal of specific fields identified as PII is not sufficient to prevent this kind of identification, as the use of additional data sources, possibly coupled with sophisticated data analysis models, can enable identification or tracing.

What does it mean to be “provably private?”

- This is a challenging question in the absence of an agreed upon definition for privacy, as proofs can only be given with respect to specific definitions. One definition that captures some of what people care about when they talk about privacy is a mathematical definition of privacy called “differential privacy.” Unlike a definition based simply on removal of a fixed number of elements designated as PII, the guarantees of differential privacy apply regardless of additional data sources that might be available to an attacker. An algorithm that performs data analysis is differentially private if the responses are essentially the same if any individual person in its input database is present or not.

What is the number one thing I can do to protect my privacy when using social media?

- The most complete way to protect your privacy on social media is to not use social media. If you are using social media, make sure you are familiar with options for privacy settings, check and possibly adjust your privacy settings, and make sure you understand your audience whenever sharing information.

How can I learn about privacy concerns in social media apps I use?

- Most apps provide some kind of information to users about their privacy settings and ways for user to handle privacy, though their perspective can be one-sided. A good starting point to learning about current privacy issues in current social media apps is by following the news (perhaps even through social media channels) or to use a search engine to find relevant content. For example, a Google search for *facebook privacy* yields some links to Facebook's own documentation and information about privacy, as well as guides from other technology-oriented sources. Similarly, a search for *snapchat privacy* turns up results both from Snapchat and other sources.



Are there any secure and robust ways to anonymize data?

- Distorting data by throwing it out and replacing it with random data is secure and robust, but clearly also useless. The challenge is to find methods that retain some of the utility of data while still providing some measure of anonymity or privacy. There are ways to use data that have robust guarantees, including differential privacy mentioned earlier, but even these methods have a tradeoff between providing more privacy or more utility.

What would you recommend as an approach to begin learning more about specific computer science topics like privacy and cybersecurity?

- Investigate resources that interest you:
 - Academic talks on YouTube
 - TED Talks
 - School courses
 - Coursera online courses

Getting Involved in Computer Science Extra-Curricular Activities

What are the benefits of CS extra-curricular activities?

- Be part of a community with others who share your interests.
- Explore computing beyond the classroom.
- Help others, develop your leadership skills, or learn new CS concepts and skills.
- Being involved in campus life has been shown to increase likelihood of graduation.
- It looks good on your resume and makes a great discussion point at an interview.

How can I link my extra-curricular club to a club at another school?

- Invite other schools to join a hack-a-thon at your institution.
- Connect through national organizations including CRA-W and ACM-W.

How can I balance extra-curricular activities and my classwork? I feel that I am overextending myself, how do I choose?

- Be cognizant of when you're truly overextended and need to step back to make classwork a priority.
- Recognize that you can change your commitments from one semester to the next. If you want to try new extra-curricular clubs, you can choose to make time for them by taking a break from activities you participated in previously.
- Consider selecting on-campus activities to ensure events are scheduled in alignment with college timelines. For example, off-campus activities might have large events the same week as finals.
- Be selective about your leadership roles.

How might I go about setting up a club at my school?

- Come up with an idea for your club and recruit a core group of people who are interested in participating.
 - Tell your friends, create flyers, post on Facebook, etc.
- Investigate specific criteria at your institution for being an official club (which potentially includes receiving financial support from the university).

