

User Opt-In Session Campus Experience

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Experimental Opt-In

Some Perspective:

- If we are truly honest about this, every network user is participating in a grand experiment that we are all conducting every day.
- It's not always as blatant as the recent Facebook debacle, but every time I try a new setting on the wireless controller to improve high density classroom performance, I'm experimenting with human subjects.







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This is not an excuse to be irresponsible. Just some perspective to keep in mind.







Network Trace Collection

- The GT-RNOC got its start in this business
 - providing real network traffic information for researchers
 - both Clark and Hutchins dissertations came partially from real trace gathering
 - router updates, web logs, DNS logs, full packet capture, dial-in logs
- Extensive work on anonymization/de-identification
 - including prefix preserving
- Today: mostly work with NetFlow, SNORT logs, wireless mobility logs
- As the self-appointed data stewards, we've been wrestling with the policy side of this for a long time!







CNUSP

Expectation of Privacy

Georgia Tech provides Users computing and network resources (together, "Computing Resources") for the purpose of conducting authorized Georgia Tech business. Computing Resources are to be used in a safe and efficient manner. **Users have no expectation of privacy to any information created or stored on any Georgia Tech Computing Resource.** Authorized Georgia Tech Officials have the right, at any time and in their sole discretion, to monitor, access, search and read any information stored on any Computing Resource. Any examination of a User's usage of Georgia Tech's Computing Resources will be conducted in accordance with Federal and state laws, as well as approved University System of Georgia and Georgia Tech policies and procedures. Users should use discretion and good judgment before using Georgia Tech Computing Resources for personal use, and should remember that any personal content will not be confidential.

Computer and Network Usage and Security Policy - http://policies.gatech.edu/computer-and-network-usage-and-security







Institue Review Board (IRB)

- Despite the wide latitude granted in the CNUSP, we generally require students to file an IRB protocol and seek approval before using end-user network traffic as part of their research
 - forces students to take things seriously
 - makes sure that we are keeping up with evolving guidelines and policies







Other Procedures

- Students review a two page policy document on data sensitivity and handling procedures
- Students sign an NDA and agree to the data management plan (no logs on their personal laptops, etc)
- Use de-identified data whenever possible
- RNOC staff reviews results to be published to scrub for any sensitive data concerns







Formal User Study Example

- Immersive Video
 Experience
 Platform
- Leveraging GENI for SDN-based video transport
- Full IRB protocol for ongoing UI studies
- Network data could be shared if part of study protocol





