

Critical Thinking and Argumentation in Software Engineering

- Hieu Tran -

Video Surveillance and the No-Privacy-in-Public Argument

Chapter 18

Facts and Figures

- United Kingdom
 - Centralized surveillance system
 - London: over 4 million CCTVs
- United States of America
 - Growing system with more cameras being installed
 - Washington D.C: around 4800
 - Chicago: 700
 - 25% of US households investing on camera system

Silent Video Surveillance

- Foreign spies are protected
 - Detailed description of what to be under surveillance
 - No normal investigation obtains information
- Regulation for US citizens
 - No protection from silent video surveillance
 - Communication protection

Paradigm of Secrecy

- Private vs. Public places surveillance
 - Private place under legal protection
 - No protection whether in public
 - Government records activities of citizens at public spaces
- Unless being Foreign Spies

Regulating Surveillance - Problems

- Limitation to freedom
 - Difficult to be anonymous speaker
- Giving significant power to watchers
 - Abundant information retrieving when searching
 - Control and Judgement of watchers
- Information leaking and abuse
- Debate over usefulness to deter crime
 - Shifting crime geographically rather eliminating (Berkeley, US)
 - Failing to reduce people's fear of crime (London, UK)

Regulating Surveillance - Guidelines

- Accountability and transparency
 - Notice of surveillance
- Strong penalties for abuses
- Deletion of old data
 - Periodically delete to prevent misuse
- Prevention of mission creep
 - Purposes are specified prior to collect data
 - Data are used only for the purposes
 - New uses must be approved by Court
- Protection of First Amendment rights
 - Strict protection of non-silent video surveillance (speech, ideas, protests, etc.)

Should the Government Engage in Data Mining

Chapter 19

Government and Data Mining

- Adopt to law enforcement
 - Predict possible crime
 - Predict future terrorist attacks, seek identify terrorists
- Supporters claim no privacy harm
 - Only existing data – no new data disclosed
 - Rare data touch by human – computers involve in analyzing
- Hidden data mining projects of Government

Problems of Data Mining

- Inaccuracy
 - Difficult to draw accurate human profiles
 - May ignore new behaviors due to lay on the past
- Equality (regardless of race, ethnicity, religion)
 - Human still involves in final judgment of profiles
 - Is analysis naturally done by computers? (risks of computer code to fake results)
- Hard to transparently perform
 - Difficult to balance privacy and security
 - How to ensure accuracy of secret process
 - How to ensure no abuse

Problems of Data Mining (cont.)

- First Amendment concerns (speech freedom)
 - Some actions may be suspicious to Government
 - Affecting individual habits of reading, speaking
- Due process of law
 - Prejudicial decision of computers
 - Missing basic procedures for notice hearing before flagging certain people
 - No reaction from people to prove innocence because of secret mining process

Permission to Perform Data Mining

- Investigation to prevent ticking terrorism
 - Got information from creditable sources about suspicion
 - Data mining to identify potential attackers
- Suspicious flight students
- Flight passengers checking at airport
 - Determine who are subjected to extra screening
 - Restrictedly use for this purpose

Thanks for your listening

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