Introduction to IT Related Law

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Overview

- Definitions
- Review of significant computer laws and cases
 - A very small sampling of relevant legal law
 - Only US-level law, but computer law also varies from country to country, state to state, and sometimes even between municipalities within a state
- Group-based reading (one topic per team)
- Share back

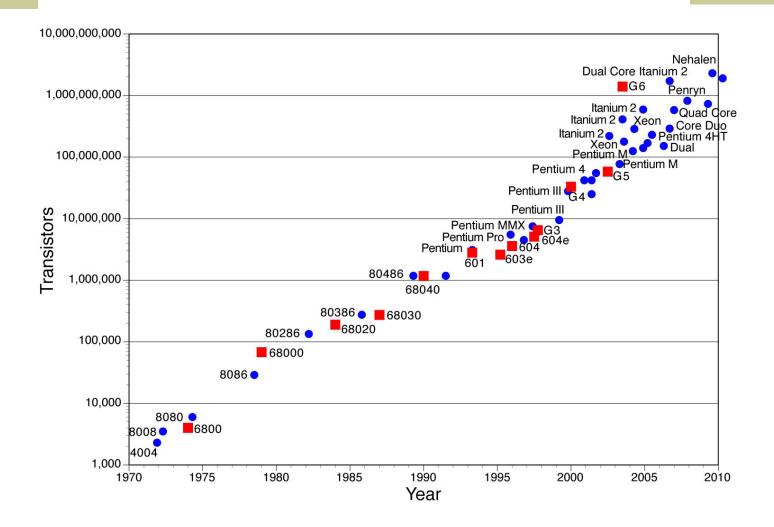
Landmark Laws in Computing

Murphy's Slaw



http://www.cartoonstock.com/newscartoons/cartoonists/bve/lowres/bven702l.jpg

Moore's Law



http://letshavetheconversation.blogspot.com/2011/11/moores-law-economics-of-abundance.html

Copyright Law

- "Copyright: the exclusive legal right to reproduce, publish, sell, or distribute the matter and form of something (as a literary, musical, or artistic work)" [merriam-webster.com]
- Article I, Section 8, U.S. Constitution: Congress shall have the power "To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries..."
- A copyright is a statutory monopoly in a work

Copyright Basics

- You get a copyright by reducing something to a "tangible form" - no need to file it with anyone.
 - © 2013 All Rights Reserved
- Music, art, books, magazines, dances, baseball playby-play (without the express written permission of Major League Baseball)
- E-mails, tweets, Facebook postings, snapshots can all be copyrighted if they are of sufficient length and uniqueness (low standard)
- Copyright holder granted a "bundle of rights" to use, to prevent use, to copy, display, public performance.
- But some "fair uses" may be made

Copyright Levels

- Do nothing
- Add: © 2013 All Rights Reserved
- Register with Copyright office

Copyright CyberLaw

- Digital Millennium Copyright Act (DMCA)
 - 1998 law based on World Intellectual Property Organization treaties
 - Controversial sections:
 - "anti-circumvention" criminalizes the circumvention of access controls (even if you're not violating a copyright law!)
 - Can you jailbreak your own phone, mod your own games, backup software, or create your own chipsets?
 - "safe harbors" protects service providers from being prosecuted or sued over third-party violations that are hosted on their sites
- Stop Online Piracy Act (SOPA)
 - Would essentially eliminate the "safe harbor" provision of the DMCA
 - Amid much controversy, was tabled in January 2012



- "Patent: a property right granted by the Government of the United States of America to an inventor 'to exclude others from making, using, offering for sale, or selling the invention throughout the United States or importing the invention into the United States' for a limited time in exchange for public disclosure of the invention when the patent is granted." [US Patent Technology Office]
- A copyright protects the expression of an idea
- A patent protects the invention of a thing (or sometimes a process)
- Both are forms of "intellectual property"

Software Patent Law

- There isn't a separate "software patent law"
- Software may or may not be patentable, according to existing law
 - Patent law prohibits patenting "abstract ideas"
 - You would think that this would prevent patents on software/algorithms
 - But no...
- Famous case: Gottschaik v. Benson the defendants were not permitted to patent an algorithm for binary-to-decimal conversion
 - You would think this pretty much settled it. But no...
- Patent trolls cost US businesses \$29B in 2011*

Trademark

- Trademark identifies the provider of goods; Service Mark identifies the provider of services.
- You get a trademark by using it in commerce
- Coke, Coca-Cola, font, red color, bottle shape: all trademarked
- Many can share the same trademark (Kelly tires, Kelly temps, etc.) as long as not in same field and no "substantial likelihood of confusion"
 - What field is Apple in? Apple Computers v. Apple Records the long and winding road
- You can lose a trademark if it become generic Jeep, Xerox, Jello

Spam and Phishing

- Spam: [google definitions]
 - Noun, A canned meat product made mainly from ham.
 - Verb, Send the same message indiscriminately to (large numbers of recipients) on the Internet.
- "Phishing (sometimes called carding or brand spoofing) uses email messages that purport to come from legitimate businesses that one might have dealings with.... Typically, they ask for verification of certain information, such as account numbers and passwords, allegedly for auditing purposes... [responses] may result in financial losses, identity theft and other fraudulent activity against them."

* http://www.computerworld.com/s/article/89096/Phishing

Spam Law

- Controlling the Assault of Non-Solicited Pornography and Marketing (CAN-SPAM) Act of 2003
 - Whether you approve or not, that's an awesome acronym!
 - Establishes requirements for commercial email and authorizes the FTC to enforce these rules
 - Mostly ineffective and unforced (gee, ya think?!)
 - "6 percent of unsolicited e-mail dumped on the Internet in November [2004] complied with the CAN-SPAM law passed by the U.S. Congress last year, according to MX Logic..."*
- Identity Theft Penalty Enhancement Act (ITPEA)
 - A much lamer acronym

^{*} http://www.technewsworld.com/story/38945.html

Privacy

- Privacy: "Invasion of privacy is the intrusion into the personal life of another, without just cause.... It encompasses workplace monitoring, Internet privacy, data collection, and other means of disseminating private information." [uslegal.com]
- Right to privacy stems from:
 - Fourth Amendment: Protection against excessive, unwarranted governmental intrusion
 - Fifth and Fourteenth Amendments: Require "due process" to deprive anyone of "life, liberty, or property"
 - There is no explicit statement in the Constitution about an individual's right to privacy!

Privacy CyberLaw

- Alphabet soup:
 - Wiretap Act (1968 amended 1986)
 - Protects wire communications (telephone/telegraph)
 - Information on the Internet was long considered to be less protected (because it is passed through and stored on third-party servers)
 - ECPA (Electronic Communications Privacy Act of 1986)
 - Protects the security and privacy of stored and transmitted electronic data (and places limits on government access)
 - FISA (Foreign Intelligence Surveillance Act of 1978)
 - Authorizes government surveillance of foreign powers and terrorist groups
 - USA PATRIOT (Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism) Act of 2001
 - With an acronym like that, how could you go wrong??
 - Greatly expanded permitted government surveillance (and detention)

Computer Crime

- "The U.S. Department of Justice (DOJ), in its manual on computer crime, defines [computer] crime as 'any violations of criminal law that involve a knowledge of computer technology for their perpetration, investigation, or prosecution."" [uslegal.com]
- Three major types of computer crime:
 - Theft of hardware and software
 - Attacks on a computer system
 - The use of a computer to commit a crime

[uslegal.com] http://definitions.uslegal.com/c/computer-crime

Computer Crime

- What is the "crime" part of computer crime?
 - Theft
 - Fraud
 - Trespass
 - False Personation (Impersonation)
 - Identity theft/fraud
 - Is "information" property U.S. v. Aaron Swartz "hacked" into MIT computer and accessed JSTOR files to put online for free.
 - What is computer trespass? What is "damage?"
 - What is "access"
 - What is without authorization U.S. v. Lori Drew (Myspace suicide case)

Cybercrime

- First Internet worm:
 - November 2, 1988
 - Meant to be harmless unintended consequences led to thousands of infected computers and possibly millions of dollars in damages/costs
 - Written by Robert Morris
 - Previously worked for CSEE lecturer John Park
 - Prosecuted by Dept. of Justice
 - First conviction under the Computer Fraud and Abuse Act of 1984
 - Prosecuted by then-DoJ attorney and occasional CSEE adjunct and guest lecturer (and high school buddy of John Park), Mark Rasch



In-Class Assignment

- **•** 7:30-8:00:
 - Read the materials provided on assigned topic
 - Identify key provisions of the laws, or key findings of the cases
 - What is permitted? What is prohibited? What are the consequences?
 - Conversely: What is not permitted? What is not prohibited?
 - What are your major open questions? (Feel free to dig deeper and look up other sources if time permits)
- 8:00-9:15:
 - Three minutes to share your key provisions/findings (permitted, nonpermitted behavior and consequences) and open questions
- After class:
 - Share something you learned on Piazza (a link, an insight, a concern, a question)

Copyrights

- Digital Millennium Copyright Act
 - http://en.wikipedia.org/wiki/Digital_Millennium_Copyright_Act
 - http://www.copyright.gov/legislation/pl105-304.pdf
 - Electronic Frontier Foundation sources:
 - https://www.eff.org/issues/dmca
 - Article on jailbreaking and other exemptions:
 - http://us.practicallaw.com/3-522-0934
- SOPA
 - http://money.cnn.com/2012/01/17/technology/sopa_explained/index.htm
 - H.R. 3261 http://thomas.loc.gov/cgi-bin/bdquery/z?d112:h.r.3261:

Software Patents

- Gottschaik v. Benson 409 US 63 (1974)
 - https://supreme.justia.com/cases/federal/us/409/63/case.html
- Richard Stallman speech on misuse of software patents (transcript)
 - http://www.gnu.org/philosophy/software-patents.html
- Article about NewEgg anti-patent-troll case
 - http://arstechnica.com/tech-policy/2013/01/how-newegg-crushed-theshopping-cart-patent-and-saved-online-retail/

Spam and Phishing

- CAN-SPAM Act
 - http://uscode.house.gov/download/pls/15C103.txt
 - http://en.wikipedia.org/wiki/CAN-SPAM_Act_of_2003
 - http://en.wikipedia.org/wiki/E-mail_spam
- Identity Theft Penalty Enhancement Act (ITPEA)
 - http://www.justice.gov/criminal/fraud/websites/idtheft.html
 - http://web-5.interliant.com/fsu/cn.nsf/369fe1f2c6e098818525711d00527bff/ \$FILE/IDTheftLegis.pdf

Wiretapping and Privacy

- Wiretap Act
 - http://www.it.ojp.gov/default.aspx? area=privacy&page=1284
- Electronic Communications Privacy Act
 - https://www.cdt.org/issue/wiretap-ecpa
- USA PATRIOT Act
 - http://www.justice.gov/archive/ll/highlights.htm

Cybercrime

- Computer Fraud and Abuse Act of 1984
 - http://en.wikipedia.org/wiki/Computer_Fraud _and_Abuse_Act
- http://www.hg.org/computer-crime.html