

CMSC 304 Fall 2014

The Legal Landscape

WANTED!

—FOR COPYRIGHT INFRINGEMENT—
U. WASHINGTON PRINTER



**LAST SEEN DOWNLOADING
INDIANA JONES, IRON MAN
[HTTP://DMCA.CS.WASHINGTON.EDU](http://dmca.cs.washington.edu)**

RJ2 & RJ3
**Tuesday &
Sunday;**
Group
assignment
Thursday



Overview

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- ◆ 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



Copyright

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- ◆ “*Copyright*: the exclusive legal right to reproduce, publish, sell, or distribute the matter and form of something (as a literary, musical, or artistic work)”
- ◆ 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

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- ◆ You get a copyright by reducing something to a “tangible form” – no need to file it with anyone.
- ◆ Music, art, books, magazines, dances, baseball play-by-play (without the 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, perform in public.
- ◆ But some “fair uses” may be made



Copyright CyberLaw

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- ◆ Digital Millennium Copyright Act (DMCA)
 - ◆ 1998; based on World Intellectual Property Organization treaties
 - ◆ Controversial sections:
 - ◆ “Anti-circumvention” – criminalizes the circumvention of access controls (even if you’re not violating copyright!)
 - ◆ 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 “safe harbor” provision
 - ◆ Amid much controversy, was tabled in January 2012



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Should there be such a thing as copyright?

Are current laws the right ones?

Should there be any legal protections for intellectual works?

Are there problems with enforcement? What?



Patents

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- ◆ “*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...”
- ◆ A *copyright* protects the expression of an idea
- ◆ A *patent* protects the invention of a process or artifact
- ◆ Both are forms of “intellectual property”



Patents

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- ◆ “*Patent*: a property right granted by the government of the United States of America to the inventor to exclude others from making, using, offering for sale, or importing the invention throughout the United States and any foreign country in which the invention into the United States is first imported in exchange for public disclosure of the invention.”
- ◆ A *copyright* protects the expression of an idea.
- ◆ A *patent* protects the invention of a process, machine, or composition of matter.
- ◆ Both are forms of “intellectual property”

Should there be such a thing?

If so, [where] does it go wrong now?

Should there be legal protections for ideas?

Are there problems with enforcement? With granting?



Trademark

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- ◆ Trademark identifies the provider of goods
 - ◆ You get a trademark by using it in commerce TM
 - ◆ Registration helps in some jurisdictions [®]
- ◆ *Coca-Cola*[®], Coke, font, red color, bottle shape...

WHY?

- ◆ Many can share the same trademark if not in same field and no “substantial likelihood of confusion”
 - ◆ Apple Computers v. Apple Records – the long and winding road
- ◆ You can lose a trademark if it becomes generic – escalator, videotape



Software Patents

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- ◆ There isn't a separate "software patent law"
- ◆ Software may or may not be patentable
- ◆ Patent law prohibits patenting "abstract ideas"
 - ◆ You would think that this would prevent patents on software/algorithms, but no...
- ◆ Famous case: *Gottschalk 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*

* <http://www.inc.com/lindsay-blakely/cost-patent-trolls-startups.html>



Software Patents

11

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Should there be such a thing?

- ◆ Patent law prohibits patenting "abstract

If so, [where] does it go wrong now?

- ◆ You would think that the software/algorithm, but patents on

If not, why would you work hard on a clever new algorithm?

- ◆ Famous case: Gottschalk were *not* permitted to patent an algorithm binary-to-decimal conversion

Where do the problems lie?

- ◆ You would think this pretty much settled it. But no...

- ◆ Patent trolls cost US businesses **\$29B** in 2011*

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Spam and Phishing

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- ◆ “*Spam*. (n) A canned meat product made mainly from ham.
(v) Send the same message indiscriminately to
(large numbers of recipients) on the Internet.” *
- ◆ “*Phishing* (sometimes called carding or brand spoofing) uses e-mail 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 ...” †

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

† Google Definitions



Enforcement

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- ◆ Controlling the Assault of Non-Solicited Pornography and Marketing (CAN-SPAM) Act of 2003
 - ◆ Whether you approve or not, that's a good acronym.
 - ◆ Establishes requirements for commercial email and authorizes the FTC to enforce these rules
 - ◆ Mostly ineffective and unenforced (gee, ya think?!)
- ◆ Identity Theft Penalty Enhancement Act (ITPEA)
 - ◆ A much lamer acronym



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Should
spam be
illegal?

Can that be
enforced?

Who makes
money from
these?



Privacy

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- ◆ “*Privacy*: Invasion of privacy is the intrusion into the personal life of another, without just cause... [means of] disseminating **private** information.” *
- ◆ 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”
 - ◆ That’s about it.

* <http://definitions.uslegal.com/i/invasion-of-privacy>

Privacy Cyber Law 1968-1978

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- ◆ Wiretap Act, 1968 (amended 1986)
 - ◆ Protects wire communications (telephone/telegraph)
- ◆ Information on the Internet was less protected
 - ◆ Because it is passed through and stored on third-party servers
- ◆ FISA (Foreign Intelligence Surveillance Act of 1978)
 - ◆ FISA authorizes government surveillance of “foreign powers and terrorist groups”



Privacy Cyber Law 1978+

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- ◆ Electronic Communications Privacy Act, 1986
 - ◆ Protects security and privacy of stored and transmitted electronic data (and places limits on government access)
- ◆ USA PATRIOT Act (Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism), 2001
 - ◆ With an acronym like that, how could you go wrong??
 - ◆ Greatly expanded permitted government surveillance (and detention)



Computer Crime

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- ◆ “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.’”*
- ◆ Three major types of computer crime:
 1. Theft of hardware and software
 2. Attacks on a computer system
 3. The use of a computer to commit a crime

* <http://definitions.uslegal.com/c/computer-crime>



Computer Crime(s)

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- ◆ Theft
 - ◆ Is “information” property?
 - ◆ **U.S. v. Aaron Swartz** – accessed MIT computer and accessed files to put online for free.
- ◆ Fraud
- ◆ Trespass
- ◆ False Personation
- ◆ Identity theft/fraud
- ◆ Stalking & Harassment
- ◆ What is ‘computer trespass?’ What is “damage?”
- ◆ What is “access?”
- ◆ What is “without authorization?”
 - ◆ **U.S. v. Lori Drew** (Myspace suicide case)



Computer Crime(s)

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 - ◆ Is “information theft”
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- ◆ Fraud
- ◆ Trespass
- ◆ False Person
- ◆ Identity theft

Meaning well / getting it right

“Legal experts expressed concern that the prosecution sought effectively to criminalize any violation of web site terms of service.

which means...

every site on the Internet gets to define criminal law. ... small-stakes contracts become high-stakes criminal prohibitions.”

http://en.wikipedia.org/wiki/United_States_v._Drew

Cybercrime (historical)

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- ◆ 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





What is the Law Now?

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- ◆ Make your group our experts on a topic
 1. Identify the key legal provisions / key findings / key laws?
 2. What is/is not permitted? What is/is not prohibited? What are the consequences?
 3. What are your major open questions? (Feel free to dig deeper as time permits)

- ◆ Present to everyone (1-2 minutes)
 - ◆ Different spokesperson than usual

- ◆ Post to Piazza as a group
 - ◆ 2-4 paragraphs
 - ◆ Address points 1-3, above

Purpose of this exercise: research. To discuss an ethical question, you (really) have to know about it!



Copyrights & the DMCA

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- ◆ 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>
 - ◆ <https://www.eff.org/press/releases/eff-testify-congressional-hearing-unintended-consequences-dmca>
- ◆ SOPA
 - ◆ http://money.cnn.com/2012/01/17/technology/sopa_explained/
 - ◆ H.R. 3261 <http://thomas.loc.gov/cgi-bin/bdquery/z?d112:h.r.3261>:



Software Patents

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- ◆ Gottschalk 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>
- ◆ Some ridiculous examples
 - ◆ <http://www.pcworld.com/article/2039282/10-tech-patents-that-should-have-been-rejected.html>
- ◆ <http://www.vox.com/2014/6/19/5824130/7-thoughts-on-the-supreme-courts-software-patent-ruling>



Patent Trolling

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- ◆ Per the EFF:
 - ◆ <https://www.eff.org/issues/resources-patent-troll-victims>
- ◆ Recent software patent ruling
 - ◆ <http://www.vox.com/2014/6/19/5824130/7-thoughts-on-the-supreme-courts-software-patent-ruling>
- ◆ Article about NewEgg anti-patent-troll case
 - ◆ <http://arstechnica.com/tech-policy/2013/01/how-newegg-crushed-the-shopping-cart-patent-and-saved-online-retail/>
- ◆ Article about Intellectual Ventures
 - ◆ <http://www.businessweek.com/articles/2014-08-19/intellectual-ventures-layoffs-hit-a-fifth-of-its-workforce>



Spam

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- ◆ CAN-SPAM Act
 - ◆ <http://www.business.ftc.gov/documents/bus61-can-spam-act-compliance-guide-business>
 - ◆ http://en.wikipedia.org/wiki/CAN-SPAM_Act_of_2003
 - ◆ http://en.wikipedia.org/wiki/E-mail_spam
- ◆ Who benefits from spam?
 - ◆ <http://cseweb.ucsd.edu/~savage/papers/Oakland11.pdf>



Phishing and Fraud

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- ◆ <http://en.wikipedia.org/wiki/Phishing>
- ◆ CAN-SPAM Act
 - ◆ http://en.wikipedia.org/wiki/CAN-SPAM_Act_of_2003
- ◆ <http://criminal.findlaw.com/criminal-charges/phishing-scams.html>
- ◆ Who falls for it?
 - ◆ <http://lorrie.cranor.org/pubs/pap1162-sheng.pdf>



Identify Theft

28

- ◆ 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](http://web-5.interliant.com/fsu/cn.nsf/369fe1f2c6e098818525711d00527bff/$FILE/IDTheftLegis.pdf)
- ◆ Identity Theft Center
 - ◆ http://www.ovc.gov/pubs/ID_theft/idtheftlaws.html



Wiretapping and Privacy

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- ◆ 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>
 - ◆ http://www.salon.com/2014/09/04/patriot_acts_absurd_new_spawn_just_when_you_thought_it_couldnt_get_any_worse/
 - ◆ <https://www.aclu.org/national-security/aclu-v-clapper-challenge-nsa-mass-phone-call-tracking>



Cybercrime: Bullying

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- ◆ Computer Fraud and Abuse Act of 1984
 - ◆ http://en.wikipedia.org/wiki/Computer_Fraud_and_Abuse_Act
- ◆ <http://www.hg.org/computer-crime.html>
- ◆ Lori Drew vs. United States
 - ◆ <http://www.dmlp.org/threats/united-states-v-drew>
 - ◆ http://en.wikipedia.org/wiki/Suicide_of_Megan_Meier
- ◆ <http://www.stopbullying.gov/laws/maryland.html>
- ◆ <http://www.irishexaminer.com/ireland/dcu-seeks-publics-help-to-tackle-subtle-cyberbullying-285366.html>



Cybercrime: Stalking

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- ◆ Background:
 - ◆ Computer Fraud and Abuse Act of 1984
 - ◆ http://en.wikipedia.org/wiki/Computer_Fraud_and_Abuse_Act
 - ◆ <http://www.hg.org/computer-crime.html>
 - ◆ <http://en.wikipedia.org/wiki/Cyberstalking>
- ◆ Some specifics:
 - ◆ <http://www.cybercrimejournal.com/pittaroijccvol1is2.htm>
 - ◆ <http://www.ncsl.org/research/telecommunications-and-information-technology/cyberstalking-and-cyberharassment-laws.aspx>