CS 428
Legal Issues for IT Practitioners

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Obligatory Disclaimer

- I am *not* a lawyer
- This is *not* legal advice
- BUT
  - I have worked in IT for 46 years
  - I have spent the last 21 years serving as an expert witness in IT-related litigation, in cases dealing with five of the six key forms presented here

Six areas of caution

- Intellectual property
- Employment agreements, including non-compete
- Private “non-work” projects
- Unauthorized access
- Troubled/failed IT projects
- Preservation and discovery of files

- Four key (and different) forms of protection:
  - **Patent**
  - **Copyright**
  - **Trade secret**
  - **Licensing**
- Trillions of dollars at stake
- Companies and industry associations love to litigate and to seek major damages

Intellectual Property

PATENTS

- Established by the US Constitution
- Protects a novel invention for a certain number of years
  - You disclose how your invention works so that everyone can see it
  - They can't use it w/out permission (or payment) for a certain number of years (14, 17, 20), after which the patent expires
- Patent applications can be rejected, and existing patents found 'invalid' for not meeting the following standards:
  - Novel
  - Non-obvious
  - Useful
  - Sufficient disclosure of invention
- Software patents remain a very complex and inconsistent issue in the courts, up to and including the Supreme Court

Copyright

- Protects “original works of authorship including dramatic, musical, and artistic works” as well as source code and architecture
- Does not protect facts, ideas, systems, concepts, methods of operation, recipes, names, titles, slogans
- Inconsistent rulings on copyright of software user interface
- Courts provide a mechanism for finding ‘non-literal copying’ of source code (abstraction-filtration-comparison)
- Copyright is automatically granted upon expression; you don’t have to publish or file anything, and you don’t even have to have copyright statement in the work
  - However, to file a copyright infringement case, you do need to do a federal filing of copyright first
  - And generally, it’s a good idea to include an explicit copyright statement and to keep some sort of dated archive of your work

Trade Secret

- Opposite of patent: protection through secrecy
  - Information that "has either actual or potential economic value by virtue of not being known"
  - "has value to others who cannot legitimately obtain the information"
  - "is subject to reasonable efforts to maintain its secrecy"
  - Classic example: recipe for Coca Cola
- Trade secrets can be reverse engineered (usually)
- Trade secret misappropriation can be alleged if infringer got the information through "improper means"

Licensing

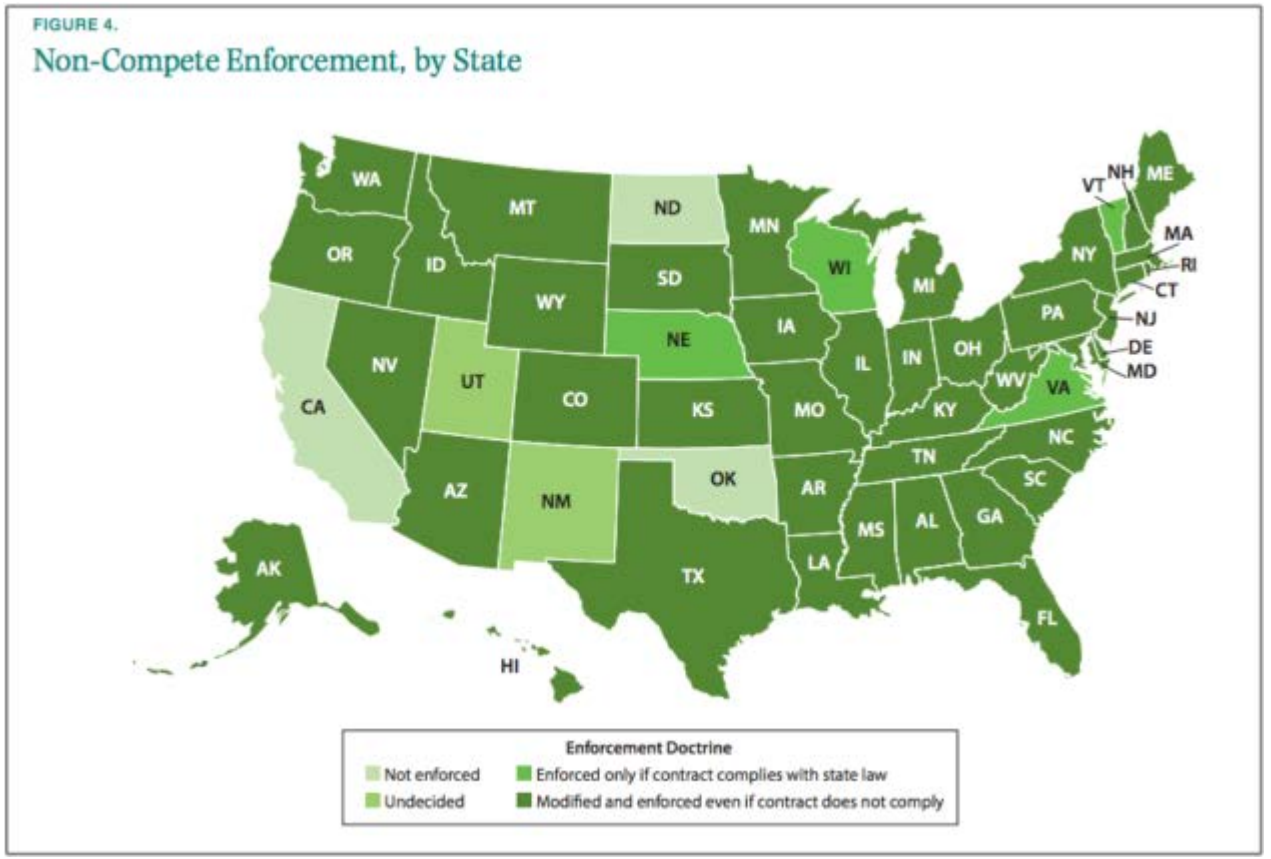
- Contractual grant of use under mutually agreed upon terms and conditions
  - How many of you read your EULAs?
- Frequently limits how and when the protected material can be used, distributed, etc.
- Sets limits independent of patent, copyright, trade secret
- May bar or limit reverse engineering, use outside of scope, derivation, specific application
- Personal violation of license agreements (especially music, video, games) can result in very substantial fines
- Likewise, companies that violate licensing agreements on software can face very substantial fines

Agreements: Confidentiality, Non-Disclosure, Employment, Non-Compete

- Explicit legal agreements to establish ownership of information and/or control when and how it can be used
- Independent of all the prior protections
- Companies looking to do business together will often require CAs/NDAs before revealing internal information
- Employers will frequently require you to sign a confidentiality agreement/NDA when you go to work for them.
- They may also have you sign an employment agreement and/or a non-compete agreement
  - Always, *always*, ***always*** read them carefully
  - Do ***not*** accept verbal assurances that "we don't really enforce them"

Non-compete restrictions

- Most states allow “non-compete” clauses that prohibit you from working for a direct competitor
- Even if you move to another state, that state may uphold in court a more-strict non-compete clause than your state allows
- ***Always*** ask about and resolve non-compete requirements *before* accepting a job
- ***Always*** get details in writing (vs. verbal reassurances)
- Ask about using a non-disclosure agreement (NDA) instead of a non-compete
- If the company insists on a non-compete, require an explicit list of excluded companies (vs. a general “anyone doing X”)



Source: https://www.brookings.edu/wp-content/uploads/2018/02/es_2272018_reforming_noncompetes_support_workers_marx_policy_proposal.pdf

Non-compete variations

- Many of you may have “at-home” or “proto-startup” projects that you work on
- Your employer may (try to) claim ownership of any IT work you do, even when outside of work hours and on your own equipment
- Disclose all existing private projects, in progress or planned, and make your exclusive ownership of that work part of your employment agreement
- Never, never, ***never*** work on a private project using company equipment and/or at company offices and/or on company time
- Again: never, ***ever*** leave with company source code, documentation, or other materials, even if you were sole author, without express written (and signed) consent

“Non-work” projects

- Computer Fraud and Abuse Act (CFAA)
  - Repeatedly modified since passing in 1986
  - Expanded scope, abolished statutory limits
  - Very broad, very vague: does not define “without authorization”
  - Offers harsh penalties (cf. Aaron Swartz)
- Be careful where you go and what you do

Unauthorized access

Does a person obtain information via computer that he is "not entitled so to obtain" when he has permission to access the information for certain purposes, but does so for an unauthorized purpose (or in contravention of some other stated limitation on its use)? The answer to this question has far-reaching implications. Every waking hour of every day, "millions of ordinary citizens" across the country use computers for work and for personal matters. *United States v. Nosal*, 676 F.3d 854, 862-63 (9th Cir. 2012) (en banc). Accessing information on those computers is virtually always subject to conditions imposed by employers' policies, websites' terms of service, and other third-party restrictions. If the CFAA effectively incorporates all of these stated limitations, then any breach of such a limitation—from checking sports scores at work to inflating one's height on a dating website—is a federal crime. *Id.* at 860-62.

From a filing In a Case before The Supreme Court about the CFAA (Van Buren v. United States)

- High rate of failure proportional to size
- Many reasons why (all of which you now know)
  - Unrealistic/mismatched expectations
  - High-risk approach to project
  - Diverging or conflicting goals
  - Course changes ("inflection points")
  - Problems with communications
  - Poor performance by one or both sides
  - Changes in key personnel
  - "In architecting a new program [or system], all the serious mistakes are made in the first day." – Spinrad, 1988
- Raise issues early and often

Troubled/failed IT projects

- Preservation of relevant files is mandated once just the *possibility* of litigation arises
- Discovery allows opposing side to request production of relevant files
- Failure to preserve and produce relevant files can result in civil and even criminal sanctions
- Make sure employer has retention policies
- Be careful in face of litigation/investigation

Preservation/discovery of files

- Working in IT, you will deal with pervasive and often cutting-edge legal issues and complications
- Ongoing technology development will continue to blur lines and create new concerns
- Be wise and cautious when you find yourself dealing with these issues
- Get everything in writing; do not rely on verbal declarations or assurances; if in doubt, pay a lawyer to review your agreements
- Do your own research on these subjects: plenty of online resources

Summary