Research Methods in computer science
Spring 2020

Lecture 23

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Agenda

Intellectual Property
Human Subject Research
Conference Updates
Intellectual Property

Copyright
Patent
Trademark
Trade Secret
Copyright

Copyright is a legal concept, enacted by most governments, giving the creator of an original work exclusive rights to it, usually for a limited time, with the intention of enabling the creator of intellectual wealth (e.g. the photographer of a photograph or the author of a book) to get compensated for their work and be able to financially support themselves. Generally, it is "the right to copy", but also gives the copyright holder the right to be credited for the work, to determine who may adapt the work to other forms, who may perform the work, who may financially benefit from it, and other related rights. It is a form of intellectual property (like the patent, the trademark, and the trade secret) applicable to any expressible form of an idea or information that is substantive and discrete.

-- wikipedia
Where does copyright apply to your work?

Source code
Drawings
Paper (Text)
Documentation
Using Copyrighted work

FAIR and TEACH
Obtain license
Copyright Policy

UHS will assert copyrights on “Computer programs, software, and documentation”

UHS will not assert copyrights on “Books, journal articles, texts, study guides, lectures...”
Copyright Process

Declare, Claim, Register

The ones UHS will assert: contact DOR
BSD

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GPL

<one line to give the program's name and a brief idea of what it does.>
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GPL

Free to use and modify
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You can charge for your modification

Why are some companies hesitant to use GPL code or libraries?
Patent

A patent is a set of exclusive rights granted by a sovereign state to an inventor or their assignee for a limited period of time, in exchange for the public disclosure of the invention. An invention is a solution to a specific technological problem, and may be a product or a process.[1]:17 Patents are a form of intellectual property.

-- wikipedia
Where does patent apply to your work?

“UTILITY: any new and useful process, machine, article of manufacture, or composition of matter, or any new and useful improvement.”

Other types less applicable to your work.
Using patented work

License
Patent Process

Invention Disclosure
Provisional Application
Grant

Typically UHS will own the patent. Royalty sharing.
Human Subject Research

According to 45 CFR 46, a human subject is "a living individual about whom an investigator (whether professional or student) conducting research:

- Obtains information or biospecimens through intervention or interaction with the individual, and uses, studies, or analyzes the information or biospecimens; or

- Obtains, uses, studies, analyzes, or generates identifiable private information or identifiable biospecimens."

Where does human subject research apply to your work?

Surveys
Performance of SW/HW that interacts with humans
Human interaction related performance
How humans use different software or devices
Asking humans for opinions

Intention to create generalizable knowledge
Human Subject Research Process

Define research plan rigorously
- Human subject protection
- Data protection
- Limits on sharing and use

Research needs to be approved (IRB)
Follow the approved protocol
Conference Updates

Paper review submissions coming up
Other logistics
HW 10

Review the papers you were assigned

Summary
Strengths
Weaknesses
Details

Submit to the conference review system.
Submit as a single PDF to moodle.