

Research Methods in computer science

Spring 2020

Lecture 23

Omprakash Gnawali

April 20, 2020

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

Copyright (c) <year>, <copyright holder>
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * Neither the name of the <organization> nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL <COPYRIGHT HOLDER> BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

GPL

<one line to give the program's name and a brief idea of what it does.>
Copyright (C) <year> <name of author>

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <<http://www.gnu.org/licenses/>>.

GPL

Free to use and modify

Free to distribute under GPL

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."

<https://grants.nih.gov/policy/humansubjects/research.htm>

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.