MICHIGAN STATE UNIVERSITY

# 3/7: Intellectual Property

### **The Capstone Experience**

Dr. Wayne Dyksen James Mariani Luke Sperling

Department of Computer Science and Engineering Michigan State University

Spring 2024



From Students... ...to Professionals

### **Caveat Emptor**

- Opinions Expressed
  - My Own
  - Do Not Represent MSU
- Not an Attorney
- No Warranty

THIS LECTURE IS GIVEN IN THE HOPE THAT IT WILL BE USEFUL, BUT WITHOUT ANY WARRANTY. IT IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LECTURE IS WITH YOU. SHOULD THE LECTURE PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.



# Lots of Variables

- Who Your...
  - …Employer Is
  - ...Customers Are
- Very Different Rules/Laws/Policies
  - Industry
    - Privately Held
    - Publically Held
  - Government
  - Government Contractor
  - Educational Institution
  - Etc...

# **Intellectual Property**

- "Ideas" Worth Money Must be able to "fix in a tangible medium".
  - How to Make Something
  - How to Do Something
  - Work of Art (Music, Movie, Photo, Painting, Novel, Etc.)
  - Pharmaceutical
  - Process
  - Algorithm
  - Etc...
- Must Protect
- Types of Protection
  - Copyrights
  - Patents
  - Trademarks
  - Trade Secrets
  - Etc..
- Check with an IP attorney.

# Patent vs Copyright

#### • Patent

- Own "Idea" For 20 Years
- Protect Via Patent Process
- Harder to Obtain
- Easier (but not Easy) to Enforce Protection
- Copyright
  - Own "Text" For Life of Author + 70 Years
  - Protect Via Copyright
  - Easy to Obtain
    - Automatically
    - "© 2022 by Wayne Dyksen. All Rights Reserved."
    - By Formally Registering
  - Harder to Enforce Protection

Check with an IP attorney.

 Happy Birthday Song Patty and Mildred Hill, 1893

- Google Books
- Software

What's the motivation for granting patents and copyrights?

**Intellectual Property** 

# Patent vs Trade Secret

### Patent

- Own "Idea" For 20 Years
- Protect Via Patent Process
- Easier to Enforce Protection
- Trade Secret

Interesting Examples of Trade Secrets

- Coke Formula
- Houdini's Escapes

- Own "Idea" Forever
- Protect Via Non-Disclosure and Non-Compete
- No Enforcement Protection if Secret Disclosed

# **IP Enforcement**

#### Laws

- US State & National
- Non-US National
- International
- Big Problem
  - Counterfeiting Rampant
    - Software
    - Drugs
    - Music, Movies, Etc.
    - Clothing & Accessories
    - Etc...
  - Stealing Rampant
  - Enforcement Non-Existent in Some Countries
  - Software Alone Big \$\$

### Aside: Patent Trolls

- AKA Patent Hoarders
- Shell Companies
- Buy "Unused" Patents
- File Frivolous Lawsuits
  - Claim Defendant Violating Their Patent
  - Hoping for Settlement
  - Something Like Blackmail
- Google "patent troll"

# Non-Disclosure Agreement (NDA)

- You agree not to misuse company information.
  - Trade Secrets
  - Copyrights
  - Confidential Information
    - Product Plans
    - Software
    - Schematics
    - Etc...
  - Etc..
- Misuse Includes...
  - ...Disclosing
  - ...Selling
  - ...Using for Your Startup Company
  - ...Using at Next Employer
  - Etc...

# Intellectual Property Agreement (IPA)

- You agree to assign all IP created to your employer.
  - Copyrights
  - Patents
  - Trade Secrets
  - Etc...
- Agreements Vary in Scope
  - Relationship of IP to Your Job
  - Time
- What happens if you...
  - Increate patented IP that earns your employer \$18?
  - ...leave your employer to patent an idea on your own?

### **Non-Compete Agreements**

- You agree not to compete with your employer.
- Agreements Vary in Scope
  - Relationship of Employer Markets
  - Position
  - Time
- May Affect
  - Moonlighting
  - Career
- Can Be Very Restrictive

### **Employment Agreements**

- Required as Condition of Employment
- Agreement May Cover
  - Non-Disclosure
  - Intellectual Property
  - Non-Compete
  - Etc..
- Agreements Vary
  - Employer
  - Position
- Probably Non-Negotiable for You

## Remedies

- What happens if you violate an agreement?
- Agreements Vary
  - Function of
    - Employer
    - o Position
    - o Etc.
  - Can Be Severe
  - Should Be Taken Seriously
- Often Monetary Damages Levied Against
  - You Personally
  - Your Startup Company
  - Your New Employer
- Not to Be Taken Lightly

Typically pursued in civil courts visà-vis criminal courts.

# Seek Professional Advice

- If your idea is valuable,...
  - ...protect it,
  - ...in advance.
- Invest
  - Time
  - Money
- Consult
  - Trusted, Experienced Mentors
  - State and Local Development Authorities
  - Experienced IP Attorney
- In Advance

## **Questions?**

