

**MICHIGAN STATE**  

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**U N I V E R S I T Y**

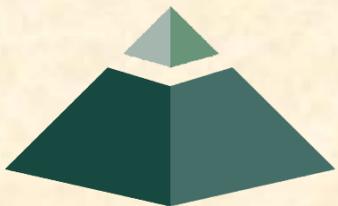
# 03/28: Intellectual Property

## The Capstone Experience

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Department of Computer Science and Engineering  
Michigan State University

Spring 2017



*From Students...  
...to Professionals*

# What's ahead?

[1 of 2]

- Week 11
  - Tu,03/28: Intellectual Property
  - Th,03/30: Ethics and Professionalism
- Week 12
  - Tu,04/04: Beta Presentations
  - Th,04/06: Beta Presentations
- Week 13
  - Tu,04/04: Beta Presentations
  - Th,04/06: Beta Presentations



Email legitimate conflicts by  
March 28.  
If you've already emailed me  
a conflict, email it again.



# What's ahead?

[2 of 2]

- **Week 14**
  - Tu, 04/18: Team Status Reports
  - Th, 04/20: Team Status Reports
- **Week 15**
  - M, 04/24: Deliver Project Videos
    - Due by 4:00 p.m.
    - To Dr. D. In Office on USB Stick
  - Tu, 04/25: Watch Project Videos
    - All-Hands Meeting
    - 3:00-4:20 p.m.
  - W, 04/26: All Deliverables
    - Software, Documents, Project Video
    - Software Checked Out of Repositories
    - Organized
    - Due by 4:00 p.m.
    - To Dr. D. In Office on USB Stick
  - Th, 04/27: Design Day Setup
    - 1:00 p.m.
    - Meet in Capstone Lab
  - Th, 04/27: Watch Project Videos
    - All-Hands Meeting
    - 3:00-4:20 p.m.
  - Fr, 04/28: Design Day
- **Week 16**
  - Th, 05/04: Project Videos



# 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 + 50 Years
  - Protect Via Copyright
  - Easy to Obtain
    - Automatically
    - “© 2017 by Wayne Dyksen. All Rights Reserved.”
    - By Formally Registering
  - Harder to Enforce Protection

Check with an IP attorney.

What’s the motivation for granting patents and copyrights?

- Google
- Classic Books
- Happy Birthday



# Patent vs Trade Secret

- Patent
  - Own “Idea” For 20 Years
  - Protect Via Patent Process
  - Easier to Enforce Protection
- Trade Secret
  - Own “Idea” Forever
  - Protect Via Non-Disclosure and Non-Compete
  - No Enforcement Protection if Secret Disclosed

## Interesting Examples of Trade Secrets

- Coke Formula
- Houdini’s Escapes



# 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 \$\$



# 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...
  - ...create patented IP that earns your employer \$1B?
  - ...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
    - Position
    - 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 vis-  
à-vis criminal  
courts.



# Seek Professional Advice

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

