



**MICHIGAN STATE UNIVERSITY**

**04/18:**  
**Intellectual Property**

[The Capstone Experience](#)

Dr. Wayne Dyksen  
Department of Computer Science and Engineering  
Michigan State University  
Spring 2011




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.



The Capstone Experience      Intellectual Property      2

### 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...



The Capstone Experience      Intellectual Property      3

### 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
  - Piece of Software
  - Etc...
- Types
  - Copyrights
  - Patents
  - Trademarks
  - Trade Secrets
  - Etc..
- Must Protect
- Check with an IP attorney.



The Capstone Experience      Intellectual Property      4

### Patent vs Copyright

<ul style="list-style-type: none"> <li>• Patent               <ul style="list-style-type: none"> <li>– Own "Idea" For 20 Years</li> <li>– Protect Via Patent Process</li> <li>– "Easier" to Enforce Protection</li> </ul> </li> <li>• Copyright               <ul style="list-style-type: none"> <li>– Own "Text" For Life of Author + 50 Years</li> <li>– Protect Via                   <ul style="list-style-type: none"> <li>▪ "Automatically"</li> <li>▪ "© 2011 by Wayne Dyksen. All Rights Reserved."</li> <li>▪ By Formally Registering</li> </ul> </li> <li>– "Harder" to Enforce Protection</li> </ul> </li> </ul> <p>Check with an IP attorney.</p>	<p>What's the motivation for granting patents and copyrights?</p>
---	---



The Capstone Experience      Intellectual Property      5

### Patent vs Trade Secret

<ul style="list-style-type: none"> <li>• Patent               <ul style="list-style-type: none"> <li>– Own "Idea" For 20 Years</li> <li>– Protect Via Patent Process</li> <li>– "Easier" to Enforce Protection</li> </ul> </li> <li>• Trade Secret               <ul style="list-style-type: none"> <li>– Own "Idea" Forever</li> <li>– Protect Via Non-Disclosure and Non-Compete</li> <li>– No Enforcement Protection if Secret Disclosed</li> </ul> </li> </ul>	<p>Interesting Examples of Trade Secrets</p> <ul style="list-style-type: none"> <li>• Coke Formula</li> <li>• Houdini's Tricks</li> </ul>
--	---



The Capstone Experience      Intellectual Property      6



## IP Enforcement

- Laws
  - US State & National
  - Non-US National
  - International
- Big Problem
  - Counterfeiting Rampant
    - Software
    - Drugs
    - Music, Movies, Etc.
    - Clothing & Accessories
    - Etc...
  - Enforcement Non-Existent in Some Countries
  - Software Alone \$51.4B Last Year

The Capstone Experience Intellectual Property 7

## 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...

The Capstone Experience Intellectual Property 8

## 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 makes your employer \$1B?
  - ...leave your employer to patent an idea on your own?

The Capstone Experience Intellectual Property 9

## 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

The Capstone Experience Intellectual Property 10

## 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

The Capstone Experience Intellectual Property 11

## 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.

The Capstone Experience Intellectual Property 12



## 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