

MICHIGAN STATE  

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UNIVERSITY

# 11/12: Intellectual Property

## The Capstone Experience

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

# Caveat Emptor

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

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# 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.

What’s the motivation for granting patents and copyrights?

- Happy Birthday Song  
Patty and Mildred Hill, 1893
- Google Books
- Software



# 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 \$\$



# Aside: Patent Trolls

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- 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...
  - ...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,
  - ...in advance.
- Invest
  - Time
  - Money
- Consult
  - Trusted, Experienced Mentors
  - State and Local Development Authorities
  - Experienced IP Attorney
- In Advance



# Questions?

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# What's ahead?

[1 of 4]

- Upcoming Meetings
  - ~~W11 11/05: Tu Garret Gaw, VP, Amazon~~
  - ~~W11 11/07: Th Rick Grubb, CIO, RPM~~
  - ~~W12 11/12: Tu Intellectual Property~~
  - W12 11/14: Th Beta Presentations
  - W13 11/19: Tu Beta Presentations
  - W13 11/21: Th Beta Presentations
  - W14 11/26: Tu Beta Presentations
  - W14 11/28: Th Thanksgiving





# What's ahead?

[2 of 4]

- Upcoming Meetings

- W15 12/01: Su Project Videos Due
- W15 12/03: Tu Project Videos
- W15 12/04: We Team Evaluation Forms Due
- W15 12/04: We All Deliverables
- W15 12/05: Th Project Videos
- W15 12/05: Th Design Day Setup
- W15 12/06: Fr Design Day
  - Need Wired Internet Connection and/or TV? ← **Nota Bene**
  - Send email to James today.
- W15 12/11: We Design Day Wrap Up (10:00 p.m. – 12:00 p.m.)



# What's ahead?

[3 of 4]

- MAPP Points Reminder ← **Nota Bene**
  - Last Week of Meetings
    - Tuesday -5.0
    - Thursday -5.0
  - Design Day
    - Timeliness / Dress / Participation -0.5 to -5.0
    - Very Late or Skip -5.0 and – Team Contribution Points
  - Capstone Wrap Up During Exam Week -5.0



# What's ahead?

[4 of 4]

- Beta Presentation
- Outline
  - Brief Project Overview (Elevator Pitch)
  - (Skip Architecture Diagram and Screen Shots Slides)
  - Software Demonstration
    - ❖ Three Use Cases
    - ❖ Follow Marshall Plan
      - » What
      - » So What
      - » Now What ← **Nota Bene**
  - Brief Summary of What's left to do?
- Use Entire 15 Minutes

