Licenses; human subjects data

Tools for Reproducible Research

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Course summary

- Make everything you do script-based
  - code + data $\rightarrow$ product
- Use version control (git and GitHub/Bitbucket)
- Take your time; organize
- Write clear code; write functions; make R packages
- Write unit tests
- Capture exploratory data analysis
  - what you did, saw, and thought (and why)
- knitr + Markdown for reports
- knitr + LaTeX for papers and talks and posters
- Use licenses to make reusability clear

Karl -- this is very interesting, however you used an old version of the data (n=143 rather than n=226).

I'm really sorry you did all that work on the incomplete dataset.

Bruce

Intellectual property

- Manuscripts/journal articles
- Books
- Software
- Data sets
- Ideas, inventions
- Lab/research notebooks
- Instructional materials
- Web sites

IP protection

- Copyright
- Patents
- Trademarks, Trade ”dress”
- Trade secrets

Copyright

- Copyright is automatic
- In ”works for hire,” the employer holds the copyright
- In academics, it is customary that researchers control copyright

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- In academics, it is customary that researchers control copyright
- At UW-Madison:

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Reproduction for criticism/commentary, teaching, and research

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- Can’t be a substantial portion of the work
- Can’t affect the value/market of the original work

Breaking copyright $\longleftrightarrow$ plagiarism

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These are totally different things.

Software licenses

- Critical if you want your code to be reused.
- Also important to protect yourself from lawsuits.
- I choose between the MIT license and the GPL.
- Don’t use Creative Commons licenses for software!

Pick a license, any license

– Jeff Atwood

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```
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```

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CC licenses: issues to consider

- BY may be an unnecessary hassle.
- CC-BY on a paper would allow a company to include it in a book
  - but maybe you don't care
- ND is really restrictive
  - all or none
  - no modifications at all
- NC means people in a company can't use it at all
  - might not be usable within a course

Data copyright

- Individual data points are generally considered facts
  - Can't be copyrighted
- Compilations of data can be copyrighted
  - Involves some creativity, so an "original work of authorship"
- But someone can just extract and reformat the data
- Can assign a license to the data files to prevent extraction and redistribution
- See `bitlaw.com/copyright/database.html`

Keep data open

- Cite the source; cite the relevant papers
- Talk to the originator of the data
  - Even if redistribution is legal, don't piss them off.
- For your own data, use CC0 (public domain)
- If you want more control, talk to a lawyer

Human subjects research

- Avoid human subjects research

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  (just kidding!)

Human subjects research

- If there are humans involved, they're human subjects
  - e.g., surveys
- Human subjects research must be reviewed by an Institutional Review Board (IRB)
- Not everything is research
  - e.g., data used solely in a course
- Most things are research
  - If you publish a paper about it, it's research
- Anonymized data may be exempt
  - But the IRB wants to make that determination

HIPAA

- HIPAA = Health Insurance Portability and Accountability Act of 1996
- Special rules about medical data with any identifying information
  - Private
  - Secure
- Full zip code may be considered identifying information.
- Dates of test results are considered identifying information.

Summary

- Pick a license, any license
- Use MIT or GPL for software
- Use CC0 for data
- Cite sources of software and data
- Talk to the source of data
- Be careful with human data
  - If you're unsure, ask for help