

# Open Sourcing Research Software



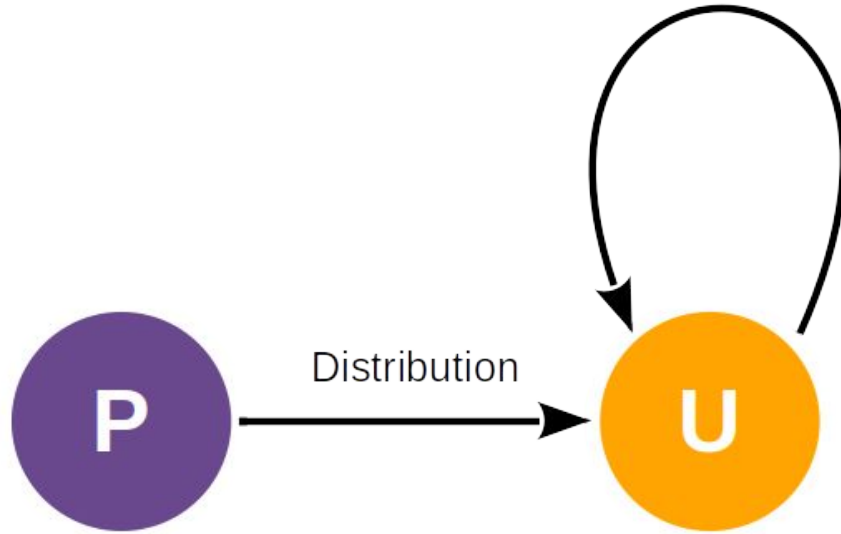
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# The Open Source Rights Grant



- Right to use
- Right to modify
- Right to source code
- Right to distribute code
  
- Always applies to copyright
- Might apply to patent rights
- Never applies to trademarks

P = Open source programmer  
U = Open source user

# How to Open Source (Research Software)



1. Clarify purpose
2. Clarify ownership rights
3. Clarify what you want to grant
4. Gather and prepare code
5. Put on public forge

# 1. Clarify Purpose



1. Document your code (“code dump”)
  - a. To support replication studies
  - b. To fulfill publication requirements
2. Benefit from community (“community project”)
  - a. Reduce work; benefit from innovation
  - b. Build a reputation through tools
3. Spin-off startup from institution (“commercialization”)

## 2. Clarify Ownership Rights

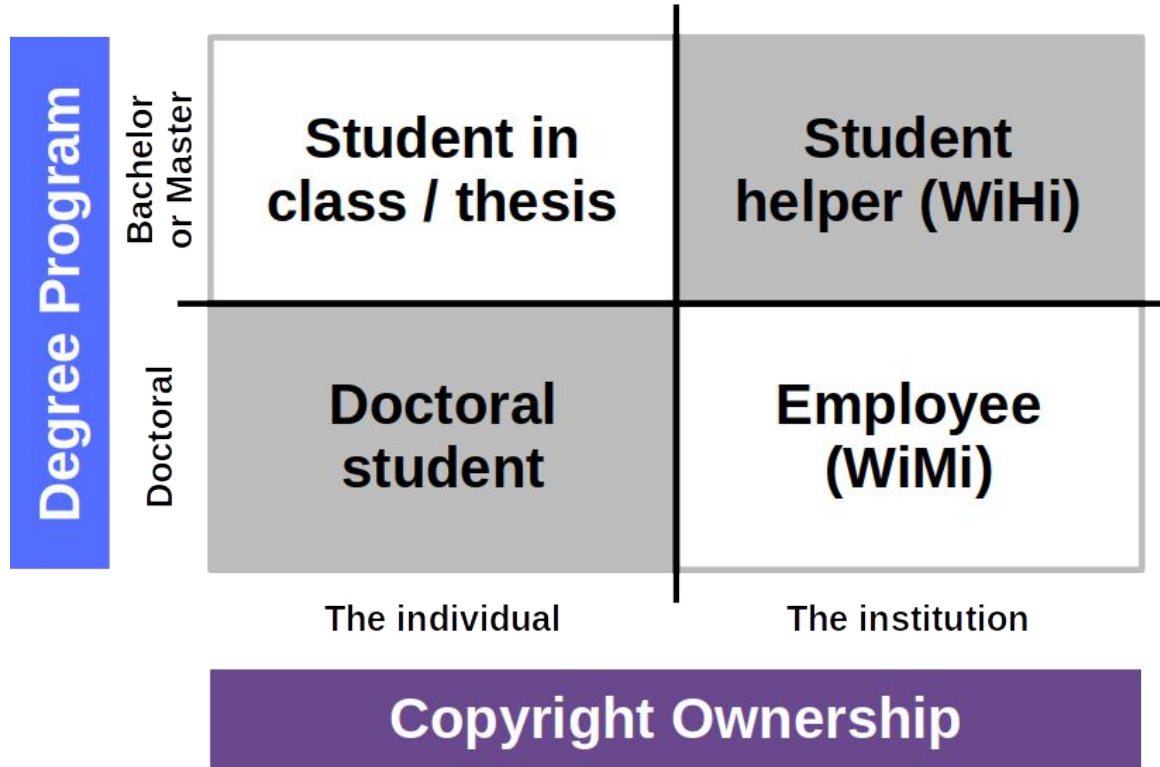


Intellectual property rights are exclusion rights

- Copyright
- Patent rights
- Trademark rights

Everyone who contributed needs to agree!

# Who Owns What When?



# Managing Ownership Rights



1. Proactively acquire agreement / ownership rights
2. Retroactively acquire agreement / ownership rights
3. Only acquire agreement / rights for current code base

This accumulates all rights at the university! Now what?

# 3. Clarify Which Rights to Grant



Do you want to grant usage rights to

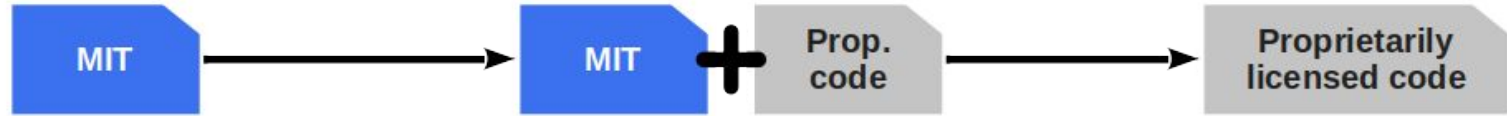
- Copyright? Patent rights?
- Allow for commercialization? Which form?

Then, choose appropriate license for open sourcing

- MIT for a pure copyright usage grant
- Apache-2.0 for a copyright + patent usage right grant
- AGPLv3 for the above + limitations on commercialization



# Redistribution and Open Source Obligations



P = Open source programmer  
D = Open source distributor  
R = Open source recipient

# Which License to Choose?

	Code dump	Community project	Commercial exploitation
MIT (copyright only)	x	a	
Apache 2.0 (copyright + patents)		b	
GPLv3 / AGPLv3 (copyleft effect)		c	x

# 4. Gather and Prepare Code



Prepare code in line with your open sourcing goal

- At a minimum, document code dump
- Prepare community project

Please follow <https://reuse.software> guidelines

## 5. Put on Public Forge



Use GitHub, GitLab, etc. to be found

- Even for a code dump, public archiving is best
- For a community project, a public forge is a must

# More Information



If you want to run a community project

- See Karl Fogel's book on [Producing Open Source Software](#)
- See Jono Bacon's book on The Art of the Community

If you want to commercialize the software

- See my course on [commercial open source startups](#)
- See also my support for [software startups out of research](#)

# Thank you! Any questions?



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