

Open Sourcing Research Software

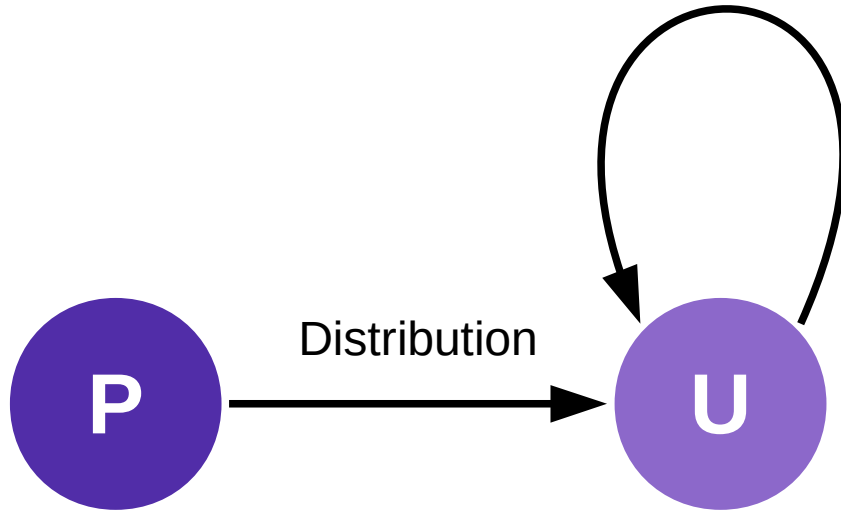
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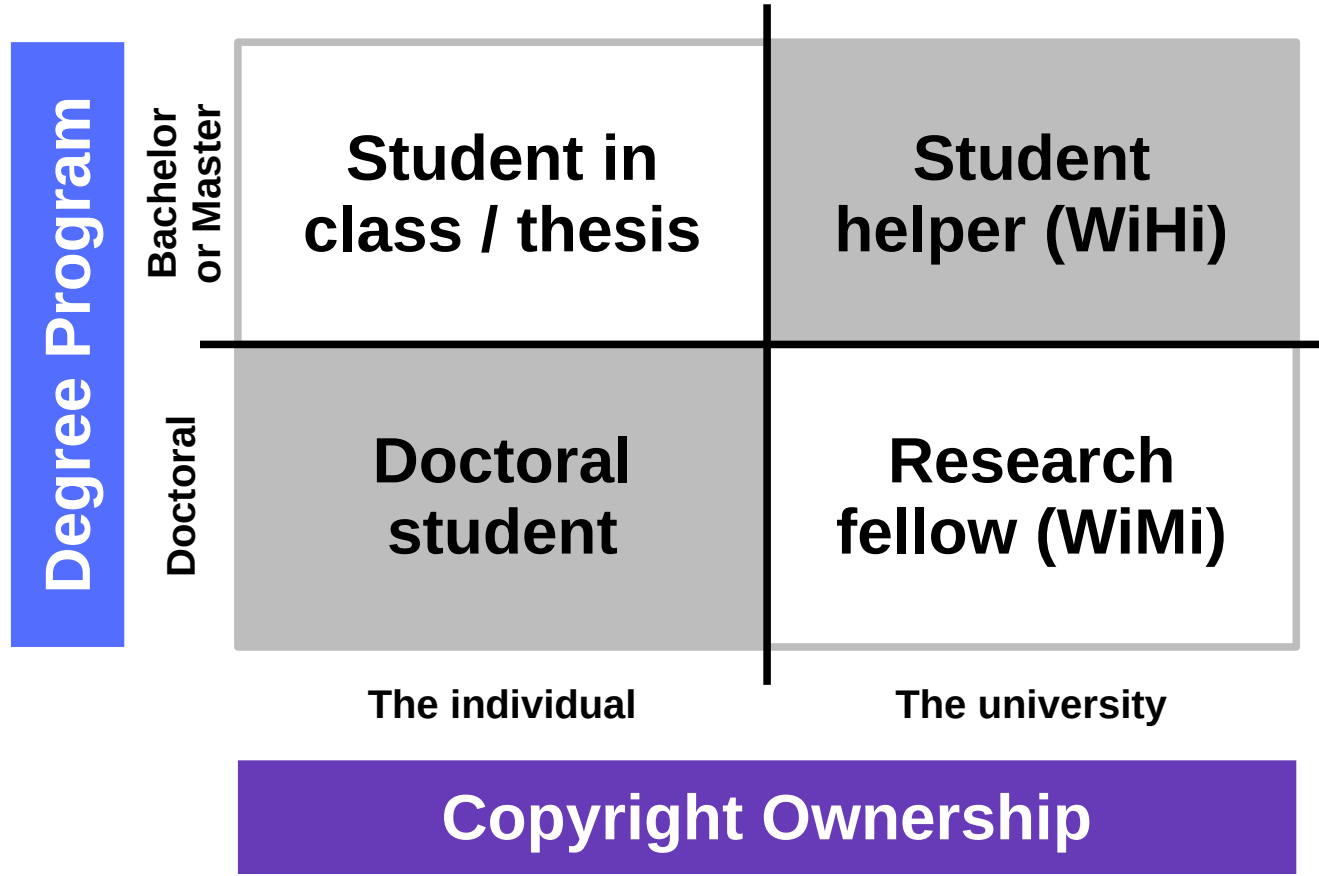
Steps to Open Sourcing Research Software

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

2. Clarify Ownership Rights



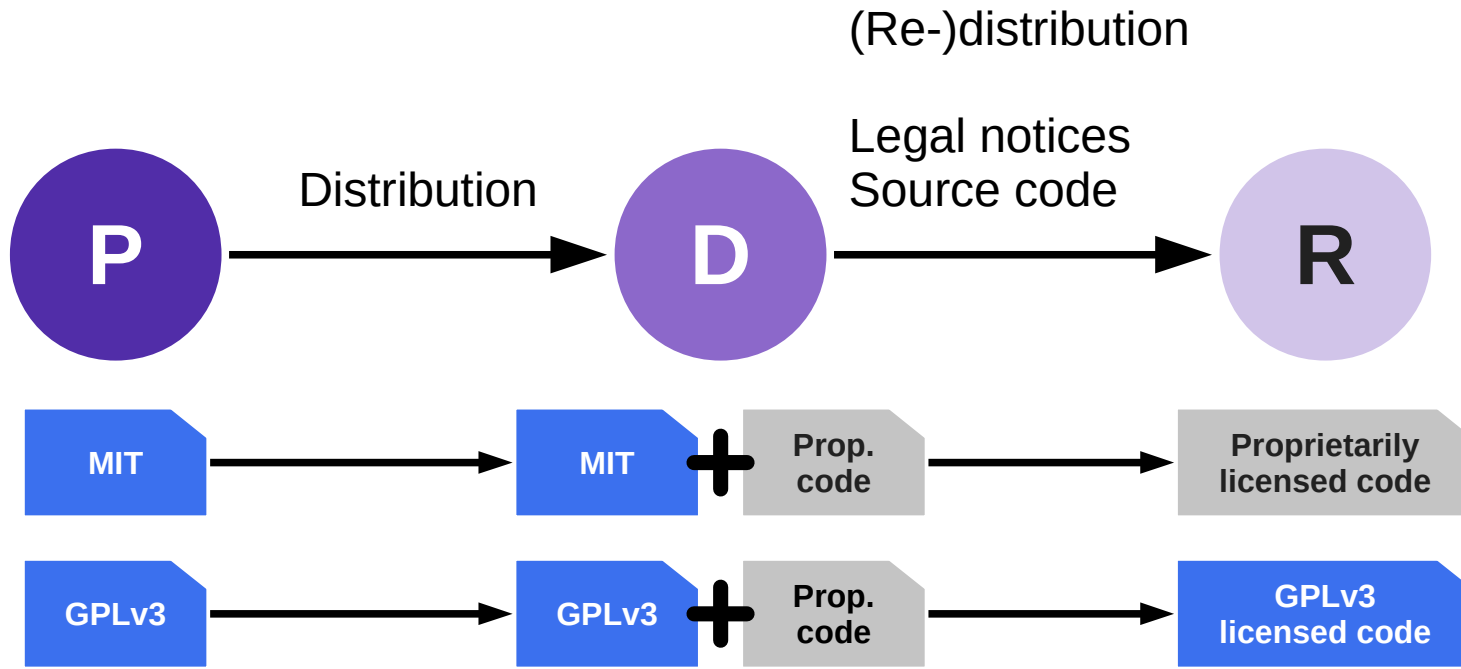
Mitigation of Determining Ownership Problems

- Proactively acquire ownership rights
- Retroactively acquire ownership rights
- Only acquire rights for current code base

3. Clarify What You Want to Grant

- Types of intellectual property to which you might grant usage rights
 - Copyright
 - Patents
 - Trademarks
- Then choose an appropriate license, for example:
 - MIT for a pure copyright usage grant
 - Apache 2.0 for a copyright + patent usage right grant
 - AGPLv3 for all of the above + Copyleft

Various Obligations Upon Distribution



Whose Freedom? The Copyleft Effect

- Permissive licenses (MIT, Apache 2.0)
 - Freedom for the recipient to keep modifications and extensions private when redistributing
 - Is usually a precondition by vendors before using any open source
- Copyleft licenses (GPL family of licenses)
 - Freedom of any recipient to receive all code affected by licenses
 - Makes sense for community open source; limits commercial participation

4. Gather and Prepare Code

- Prepare code in line with your open sourcing goal
 - At a minimum, document code dump
 - Prepare community project

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

If You Want to Run a Community Project

- See Karl Fogel's book on [Producing Open Source Software](#)

If You Want to Create a Commercial Open Source Startup

- Come to my course on commercial open source spin-offs from university
 - <https://nythesis.com/open-courses/commercial-open-source-startups/>
 - <https://oss.cs.fau.de/oss-coss-course>

Thank you! Questions?

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