Universität Stuttgart

Dr.-Sc.
Andrew
Clifton

LIKE
Open Science Course
Seminar 3:
Intellectual Property

27 October 2020

Today's discussion

1. Introduction
2. Recap:The LIKE Open Science Course
3. Let's talk about who owns (your) science
4. Closing thoughts

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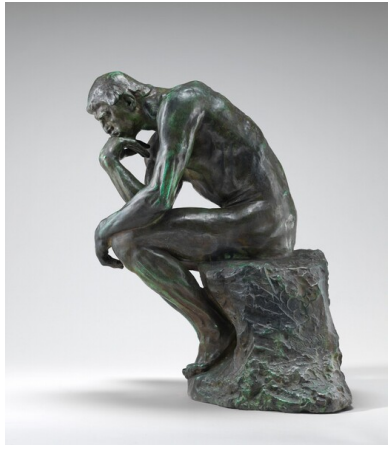
Introduction

1

Our goals for today

Discuss the practicalities of being open

- Who's data is it anyway?
- Patents and licensing
- Sharing data versus sharing experiences



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Who's here?

Andy Clifton

IEA Wind Task 32
Operating Agent

Nikola Vasiljevic

Special Consultant for
Digitalization

And you

Please introduce yourselves!

Recap: The LIKE Open Science Course

The story so far

Seminar 1: Introducing Open Science

The story so far

Seminar 1: Introducing Open Science

> *Open science is the movement to make scientific research and its dissemination accessible to all levels of an inquiring society, amateur or professional.*
>
> *Open science is transparent and accessible knowledge that is shared and developed through collaborative networks.*
>
> —*Wikipedia*

The story so far

Seminar 1: Introducing Open Science

Open science is the movement to make scientific research and its dissemination accessible to all levels of an inquiring society, amateur or professional.

Open science is transparent and accessible knowledge that is shared and developed through collaborative networks.

—*Wikipedia*

Seminar 2: Introduction to FAIR and R5 Principles

- FAIR: **F**indable, **A**ccessible, ..., ... ?
- R5?

Self-study: is your group's work FAIR?

What do you think?

Course outline

Seminar	Self-study	Assignment
1. Introducing open science		
	1. Background reading	
2. Guiding principles		
	2. Is your group's work FAIR?	
3. **Open science and intellectual property**		
	3. Implementing open science	
4. Communicating your science		
	4. Communications strategies	
		1. Implementation case study
5. What are data management plans and why do they matter?		
	5. Draft a data management plan	
Workshop: Open science in LIKE		
	6. Revise data management plan	
		2. Data management plan

Let's talk about who owns (your) science

What are the outputs of science?

Who's data is it anyway?

Your creative output at work belongs to your employer.

- It is their *Intellectual Property* (IP).

IP can take many forms:

- Formalised through patents, trademarks, copyright,...
- Also found in papers, presentations, photos, videos, audio,...

Using IP without permission is "IP Infringement" (not good).

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A detour - open science and open source

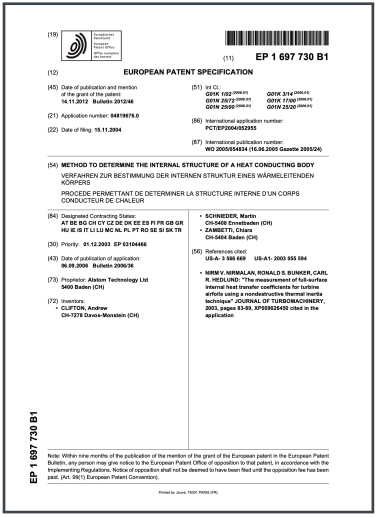
Photo by logan Weaver on Unsplash

Let's think about this:

- What's open source software?
- Is open source software free to use?
- Why would you have to pay for open-source software?

Making software open source helps open science, but isn't essential

Identifying IP



(19) Europäisches Patentamt European Patent Office Office européen des brevets

(11) EP 1 697 730 B1

(12) EUROPEAN PATENT SPECIFICATION

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WO 2005/054834 (16.06.2005 Gazette 2005/24)

(54) **METHOD TO DETERMINE THE INTERNAL STRUCTURE OF A HEAT CONDUCTING BODY**

VERFAHREN ZUR BESTIMMUNG DER INTERNEN STRUKTUR EINES WÄRMELEITENDEN KÖRPERS

PROCEDE PERMETTANT DE DETERMINER LA STRUCTURE INTERNE D'UN CORPS CONDUCTEUR DE CHALEUR

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LU MC NL PL PT RO SE SI SK TR

(30) Priority: **01.12.2003 EP 03104466**

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(56) References cited:
US-A- 3 586 669 **US-A1- 2003 055 594**

- **NIRM V. NIRMALAN, RONALD S. BUNKER, CARL R. HEDLUND: "The measurement of full-surface internal heat transfer coefficients for turbine airfoils using a nondestructive thermal inertia technique" JOURNAL OF TURBOMACHINERY, 2003, pages 83-89, XP009026450 cited in the application**

EP 1 697 730 B1

Note: Within nine months of the publication of the mention of the grant of the European patent in the European Patent Bulletin, any person may give notice to the European Patent Office of opposition to that patent, in accordance with the Implementing Regulations. Notice of opposition shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).

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IP can protect solutions, form, and content:

- Patents
- Design rights or design patents
- Trademarks
- Copyright

But it is up to you to protect 'trade secrets' from competitors!

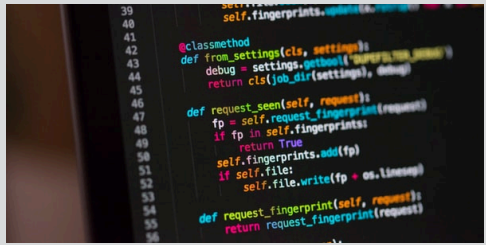
Licenses tell people how they can use code or products

Once you have protected your IP, you can think about sharing it

Created works?

Try creative commons.

Open-source software?



Try ChooseALicense.com

Get a lawyer involved!

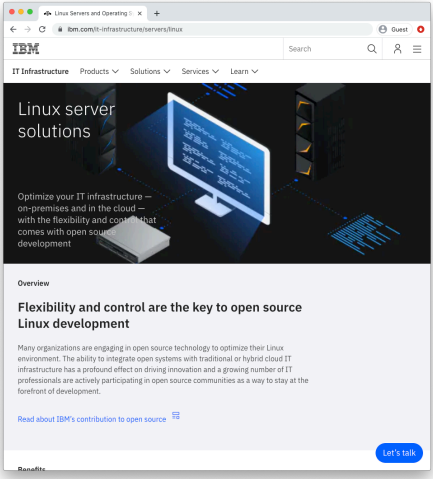
Photo credit: Photos by Patrick Tomasso (left) and Chris Ried (right) on Unsplash

An example from the COVID-19 response

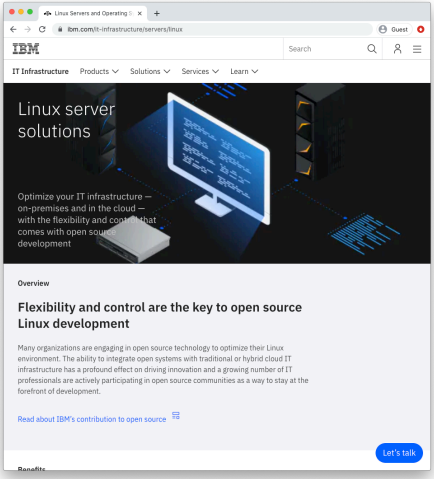
> *Amazon, Facebook, Fujitsu, Hewlett Packard Enterprise, IBM, Intel, Microsoft, NASA JPL, Sandia National Laboratories, and Uber are among the dozens of companies and institutions that have used the Open COVID Pledge to make their patents and copyrights open to the public in support of solving the COVID-19 pandemic.*
>
> —*Creative Commons Is Now Leading the Open COVID Pledge—Here's What That Means. Creative Commons, 27 Aug 2020*

But can you make money like this?

How can you make money from open science?



How can you make money from open science?



Like any business, you need to add value.

- Deploy it for customers
- Provide training
- Customize it
- Develop add-ons
- Create an ecosystem

How can you make money from open science?

Photo by Waldemar Brandt on https://unsplash.com/s/photos/bikeUnsplash

How can you make money from open science?

Photo by Waldemar Brandt on https://unsplash.com/s/photos/bikeUnsplash

Good solutions are

- Flexible but focused
- Modular
- Easy to use

Closing thoughts

4

Seminar summary

You've learned:

- What intellectual property is
- How licenses can help you
- How openness doesn't stop you making money

Photo by Mathew Schwartz on Unsplash

What to do now

Further reading

- The Birth of Linux: How Linux Got Started. (Linux.com, 2020)
- The open Bike Initiative

Self-study 3: Implementing Open Science

Working with your group, implement at least two of the ideas you identified in self-study 2.

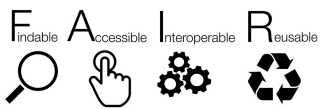
- See the guidance on GitHub.

Seminar 4: communicating your science

Selling your brand and research through social media, professional networks, etc., and other strategies to make people aware of your work.

- See the Seminar materials on GitHub

Let's make this presentation open



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