

# **Software Livre Passado, Presente e Futuro**

Melissa Weber Mendonça

SECCOM 2016

# O que é *Software Livre*?



## GNU Operating System

Sign up for the [Free Software Supporter](#)  
A monthly email newsletter about GNU and Free Software  
Enter your email address (e.g. address@hidden)

Ok

About GNU Philosophy Licenses Education Software Documentation Help GNU

Why GNU/Linux?

Search

From: RMS%MIT-OZ@mit-eddie  
Newsgroups: net.unix-wizards,net.usoft  
Subject: new Unix implementation  
Date: Tue, 27-Sep-83 12:35:59 EST  
Organization: MIT AI Lab, Cambridge, MA

Free Unix!

Starting this Thanksgiving I am going to write a complete  
Unix-compatible software system called GNU (for Gnu's Not Unix)..

## What is free software?

### The Free Software Definition

*The free software definition presents the criteria for whether a particular software program qualifies as free software. From time to time we revise this definition, to clarify it or to resolve questions about subtle issues. See the [History section](#) below for a list of changes that affect the definition of free software.*

"Free software" means software that respects users' freedom and community. Roughly, **the users have the freedom to run, copy, distribute, study, change and improve the software**. With these freedoms, the users (both individually and collectively) control the program and what it does for them.

When users don't control the program, the program controls the users. The developer controls the program, and through it controls the users. This nonfree or "proprietary" program is therefore an instrument of unjust power.

Thus, "free software" is a matter of liberty, not price. To understand the concept, you should think of "free" as in "free speech," not as in "free beer".

# Richard Stallman e o Manifesto GNU

- 1983: *GNU's Not Unix*
- 1985: Free Software Foundation



rms

“The principal goal of GNU is to be free software. Even if GNU had no technical advantage over Unix, it would have a social advantage, allowing users to cooperate, and an ethical advantage, respecting the user’s freedom.”

# As liberdades

**Liberdade 0** O usuário deve poder executar o programa, para qualquer fim.

# As liberdades

- Liberdade 0** O usuário deve poder executar o programa, para qualquer fim.
- Liberdade 1** O usuário deve poder estudar como o programa funciona, e fazer modificações para que o resultado seja o que ele deseja. (código aberto)

# As liberdades

- Liberdade 0** O usuário deve poder executar o programa, para qualquer fim.
- Liberdade 1** O usuário deve poder estudar como o programa funciona, e fazer modificações para que o resultado seja o que ele deseja. (código aberto)
- Liberdade 2** O usuário deve poder redistribuir cópias do programa para sua comunidade.

# As liberdades

- Liberdade 0** O usuário deve poder executar o programa, para qualquer fim.
- Liberdade 1** O usuário deve poder estudar como o programa funciona, e fazer modificações para que o resultado seja o que ele deseja. (código aberto)
- Liberdade 2** O usuário deve poder redistribuir cópias do programa para sua comunidade.
- Liberdade 3** O usuário deve poder redistribuir suas cópias modificadas.

## ***“Free as in beer” vs. “Free as in speech”***

Software Livre não é necessariamente grátis!

“Free software is software that gives you the user the freedom to share, study and modify it. We call this free software because **the user is free.**”—FSF

# Licenças Livres

- Copyleft é uma subversão da lei de copyright: ao invés de restringir um programa, exige que ele seja livre.
- Impede que alguém faça uma modificação a um software livre e aplique uma licença proprietária.
- Contagiosa: impede que se combine software livre e proprietário com uma licença proprietária

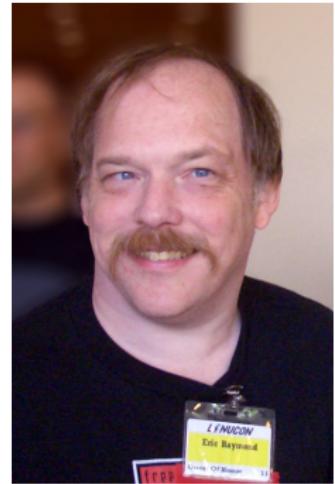


# Licenças Livres

- Apache
- BSD
- LaTeX Project Public License
- Microsoft Public License (Ms-PL)
- Mozilla Public License (MPL)
- Domínio Público
- Creative Commons

# Open Source vs. Free Software

Todo software livre é *open source* (código aberto)  
mas nem todo código aberto é software livre!



Eric S. Raymond  
(1998)

# GNU/Linux

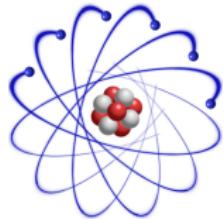
“Every good work of software starts by scratching a developer’s personal itch.” - esr

“Hello everybody out there using minix — I’m doing a (free) operating system (just a hobby, won’t be big and professional like gnu)...”



Linus Torvalds  
(1991-1992)

# *Distros*



MANJARO LINUX

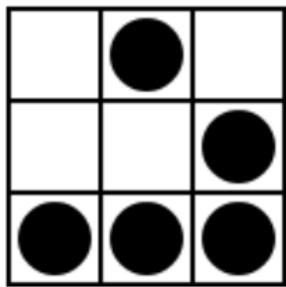
# Formatos Abertos

- Disseminação do conhecimento
- Garantia para o futuro



# Cultura Hacker na Educação

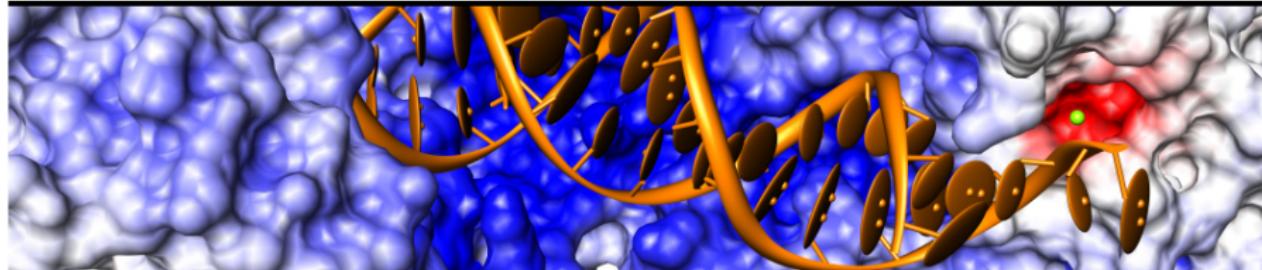
- Ética Hacker
- Nelson Pretto (UFBA): “Por uma cultura hacker na educação”



# Open Science

## The OpenScience Project

Open source scientific software



[Blog](#)   [Software](#)   [About OpenScience](#)   [Donate](#)   [Contact](#)

← Open Science Champions of Change

A Bechdel test for scientific workshops →

### OpenScience comes of age

Posted on June 23, 2013 by Dan Gezelter

In 1998, Open Science seemed like a pretty obvious projection of basic scientific principles into the digital age. I didn't think the ideas would meet much, if any, resistance from the scientific community. And in October 1999, Brookhaven National Lab sponsored a meeting called [Open Source / Open Science](#) that, in retrospect, was a pretty utopian gathering. There were a lot of the current OpenScience community members present at the meeting (notably [Brian Glanz](#) and [Greg Wilson](#)). It felt like everyone would be convinced to do Open Source & Open Data science in short order.

The past 14 years have been instructive in ***just how long*** it can take to make cultural

### Blogroll

- [arXiv.org e-Print archive](#)
- [badscience](#)
- [business | bytes | genes | molecules](#)
- [chem-bla-ics](#)
- [Computational Chemistry Highlights](#)
- [Cosmic Variance](#)
- [easternblot.net](#)
- [Eric Weisstein's World of Chemistry](#)
- [Eric Weisstein's World of Physics](#)
- [GrrlScientist](#)
- [In the Pipeline](#)
- [mathworld](#)

# Open Access/Open Knowledge/Open Data



OPEN KNOWLEDGE

# E o que a pirataria tem a ver com isso?

- Copyright v. Copyleft



# Digital rights

- Open Data
- IoT



# Comunidade

Todos podem contribuir!

- Código
- Tradução
- Acessibilidade
- Bugs
- Evangelismo

# Contato

[www.mtm.ufsc.br/~melissa](http://www.mtm.ufsc.br/~melissa)  
melissa.mendonca@ufsc.br