

Open Collaboration and Peer Production (i290m)

Course Organization

[http://courses.ischool.berkeley.edu/
i290m-ocpp/site/information.html](http://courses.ischool.berkeley.edu/i290m-ocpp/site/information.html)

Instructors



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@tmaillart



John Chuang

Faculty



Organization

Course

Fridays 11am - 1pm (South Hall 210)

Lab

Tuesday 1-2pm (South Hall 202)

until 9/24 and then on IRC Channel

Office Hours

SB → Tu 2pm (Alcove)

TM → Fr 1:30pm (Alcove)

JC → usual office hours (303A South Hall)

Class Format

Introduction by the instructor
(*≈ 35 minutes*)

Active discussion
(*≈ 55 minutes*)

Wrap-up and introduction of the next lecture
by the instructor
(*≈ 20 minutes*)

Class Content

Practice

*tools for communication
production and organization*

Theory

*concepts and tools
to understand, measure and manage
open collaboration*

External Project Participation

Hands-on open source project contributions

Project : of your own choice,

Coding : Natural language, software, 3D-printing, etc,

Contributions : New module, bug fixing, documentation, etc.

Recommended Projects :

<http://courses.ischool.berkeley.edu/i290m-ocpp/site/projects.html>

Assignments

Blog posts on the course website

On hands-on experience

making a point with the course content

(1000 \pm 500 words weekly)

! Due Tuesdays 5pm !

Final report

combining weekly blog reports into

a final collaborative work

! Due on Friday 12/20/2013 !

Grading

Class participation (20%)

Digital participation (30%)

Blog reports (20%)

Final group report (30%)

More Information

Mailing List

i290m-ocpp@ischool.berkeley.edu

Website

<http://courses.ischool.berkeley.edu/i290m-ocpp/site/information.html>

Github Repository

<https://github.com/sbenthall/i290m-ocpp-site>



Frequent updates
please check changes regularly

Open Collaboration and Peer Production (i290m)

Course Overview

The “Hacker” way (back in 1960s)

Deeply rooted sharing culture

Spirit of Freedom

Hostility to secrecy

Distaste for authority

Democratization of Innovation

Playfulness

Internet founding principles (back in 1970s)

No Security

Code is Law

Network Neutrality

Internet \approx bottom-up innovation

**Richard
Stallman**



GNU Public License (1989)

x00'000 software projects

**Linus
Torvalds**



Linux Kernel (1991)

> 14 million lines of code (\approx 172 million \$)

~7'700 developers

**Tim
Berners Lee**



World Wide Web (1991)

> 25 billion pages (March 2009)

~ 2 billion users

**Jimmy
Wales**



Wikipedia (2001)

> 14 million registered editors

> 1.27 billion edits (May 2011)

6th most visited website

365 million unique visitors (in Jan 2010)

source : Wikipedia (as of 2012)

Internet \approx massive knowledge reuse

Hyperlinks

(*World Wide Web*)

Citations

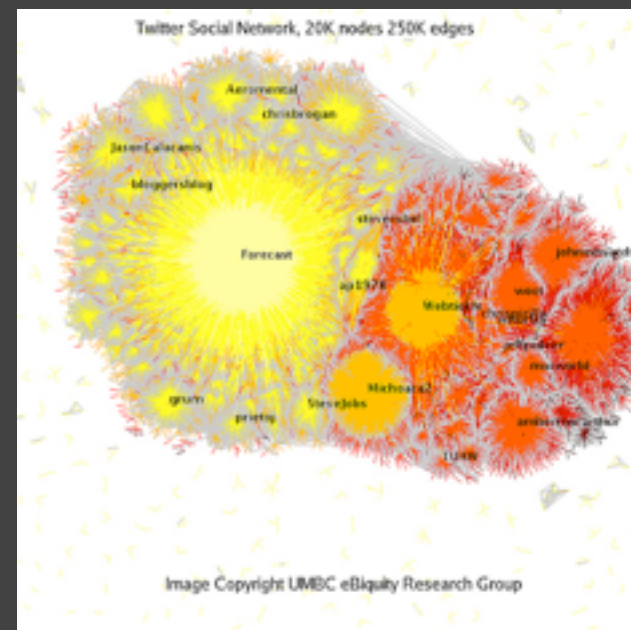
(*Wikipedia*)

Memes

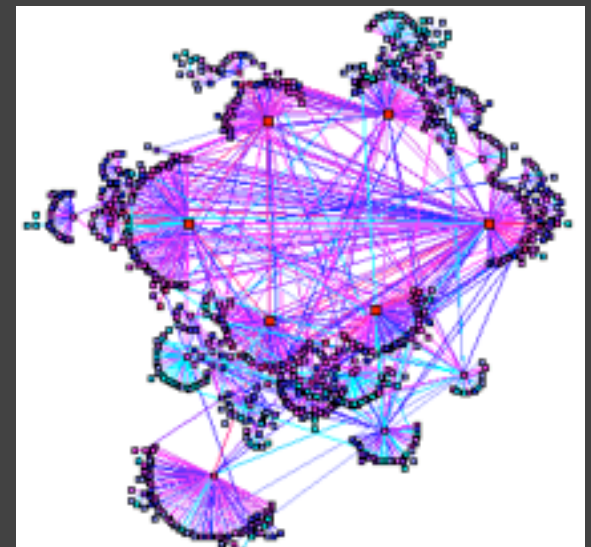
(*Social Networks*)

Software libraries / packages

World Wide Web

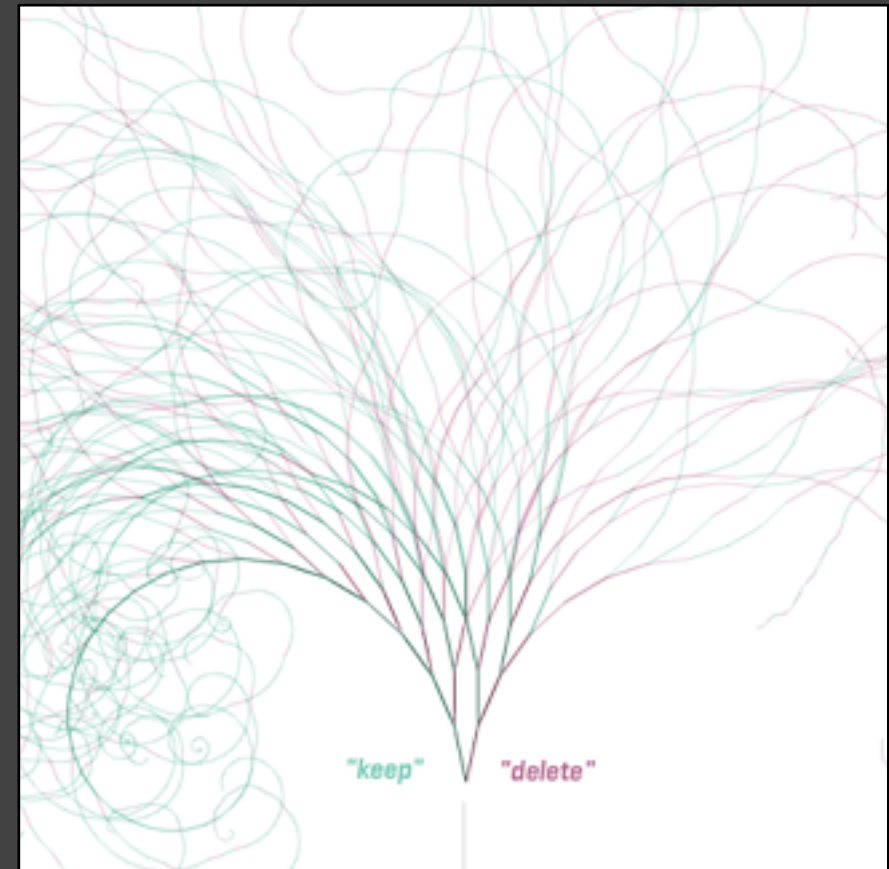
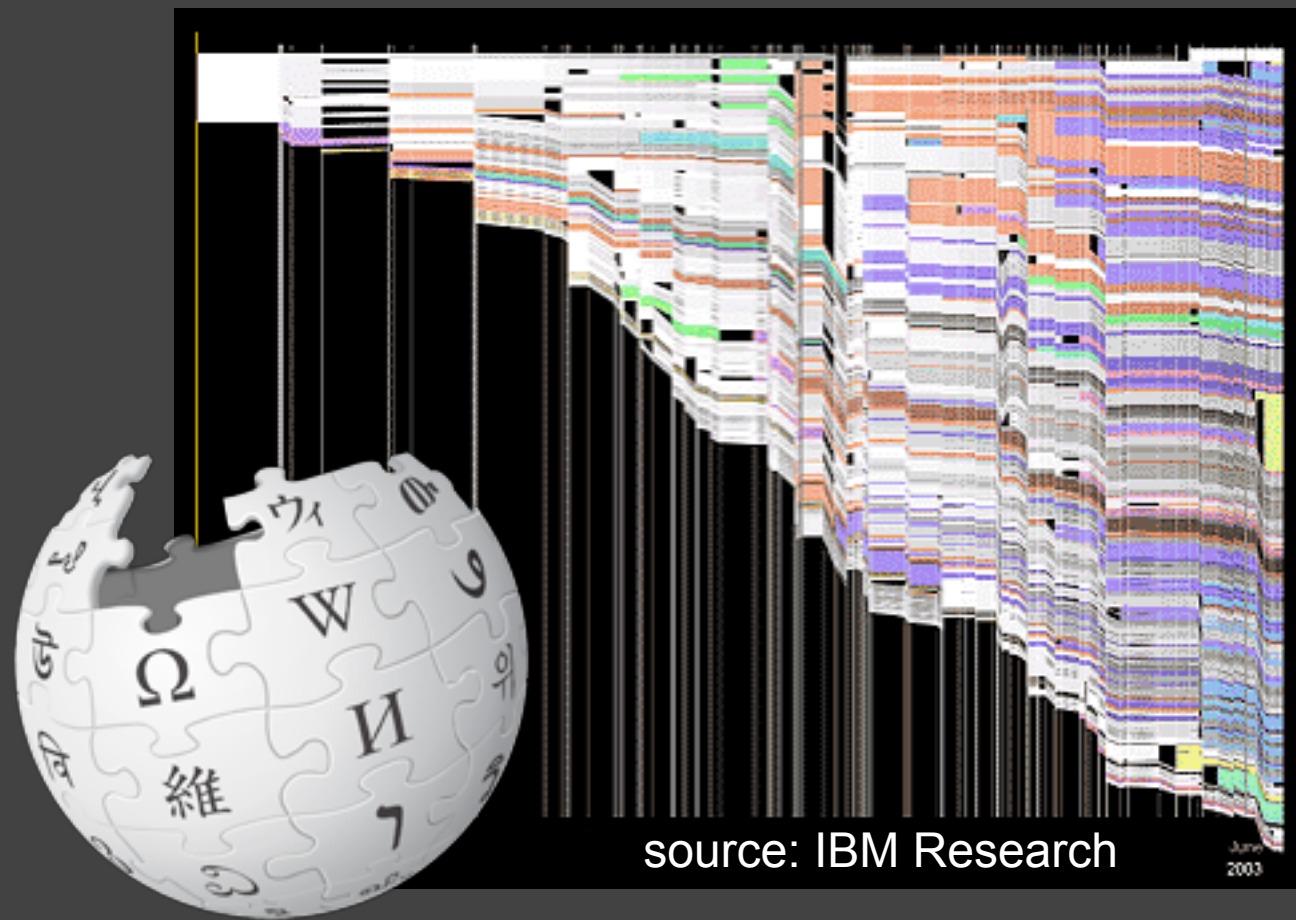


Social Networks



Source Code Dependencies

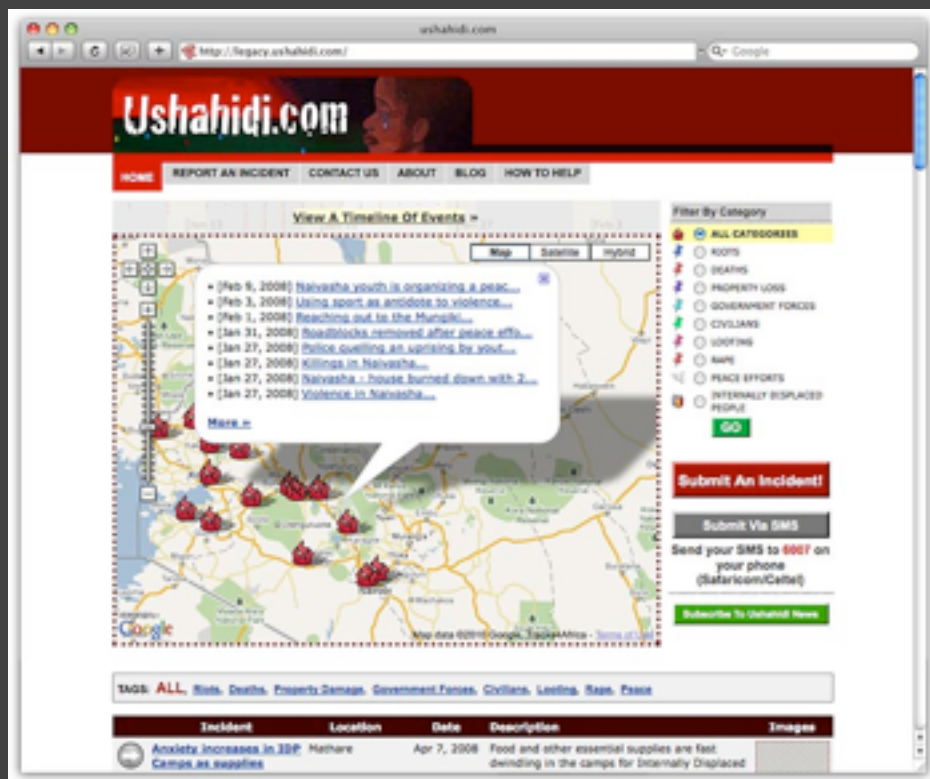
Bottom-up initiatives : Wikipedia



iterative improvement,
coordination,
heated debates

Bottom-up initiatives : social monitoring / social unrest

Reports of post-election violence in Kenya (2008)



Arab spring revolutions (2010 - present)

Riots, demonstrations, revolutions
(*not only in countries ruled by arbitrary regimes*)

Bottom-up initiatives : crowd sourcing



All Google images
sorted in < 20 days

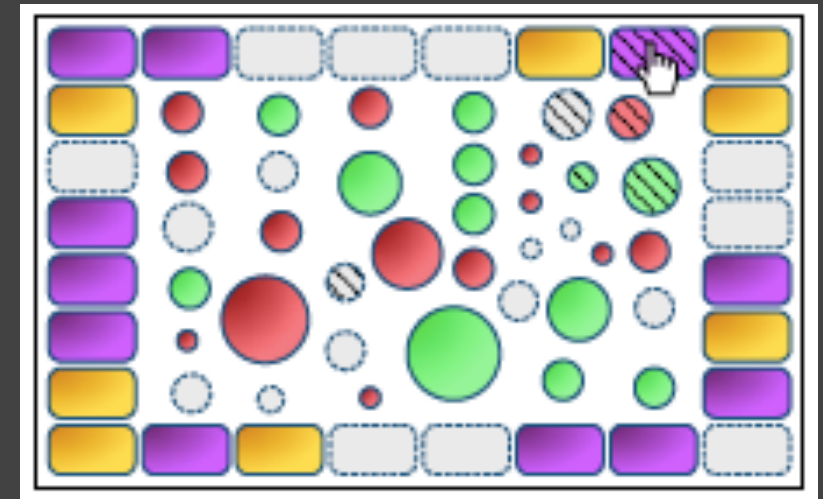
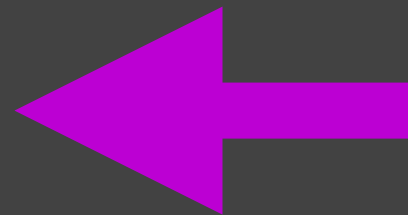
Millions of words
digitalized, while
securing websites !



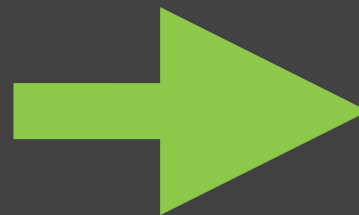
Large scale human pattern recognition

Bottom-up initiatives : mind sourcing

**Brain Power
for Electronic
Chip Design**



Human Computing for Electronic
Design Automation (EDA)



**Brain Power
for Medical
Science**

NP-hard problems solved as games !

Bottom-up initiatives : time critical mobilization



DARPA network (red balloon) challenge

10 balloons found and reported in 6:52:41 !

Making business with open collaboration and peer-production



July 9th, 2012

*Andreessen Horowitz invests \$100 million into github
to develop github:enterprise*

Open Collaboration and Peer Production (i290m)

Course Objectives

Master open collaboration tools

Understand and practice the “Hacker” culture

Make a significant contribution

Get a taste of the complex social dynamics
underlying peer-production

Organization design, institutions,
governance and management

Economics, licenses and business models
of open collaboration

Open Collaboration and Peer Production (i290m)

Course Overview

1. Collective Action, Incentives, and Performance Evaluation

Thomas

2. Technical Infrastructure and Community Etiquette

Seb

3. Social Networks, Human Timing, Triggering Dynamics, Emotions and Politeness

Thomas

4. History of open collaboration and the Web

Seb

5. Game Theory and The Evolution of Cooperation

Thomas

6. Project Governance

Seb

7. Social Networks, Cooperation, and Performance
Thomas

8. Business Models
Seb

9. Designing Organizations for Productive Bursts
Thomas

10. International collaboration / Practicum Updates
Seb

11. Licenses, Economics and Management of Modularity
Thomas

12. Open Collaboration and Education
Seb

13. Guest Lecture