

A Moveable Feast: the del.icio.us web

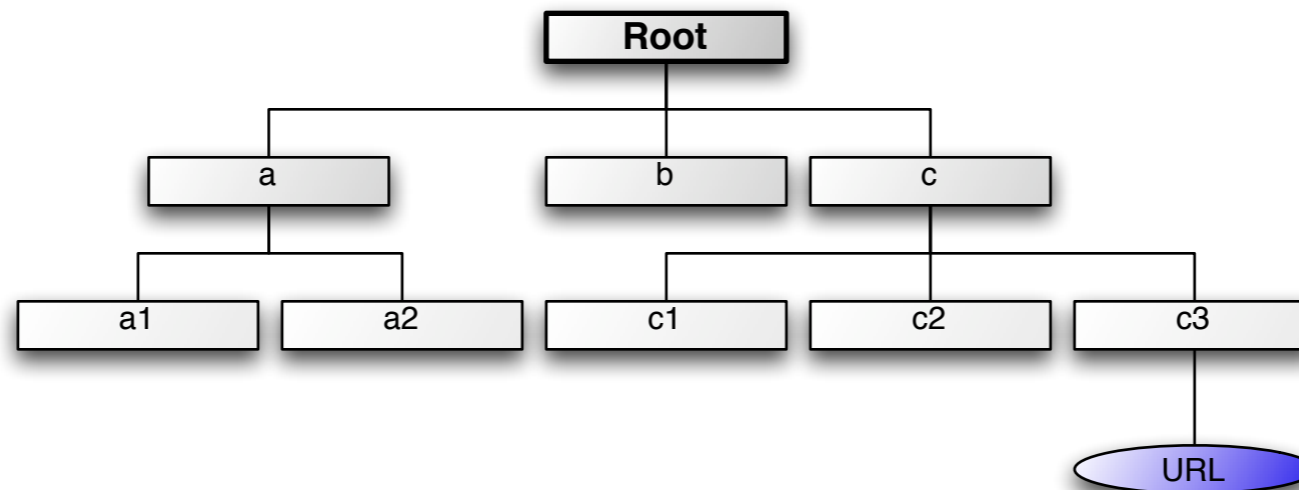
Ruben R. Puentedura, Ph.D.

What is del.icio.us?

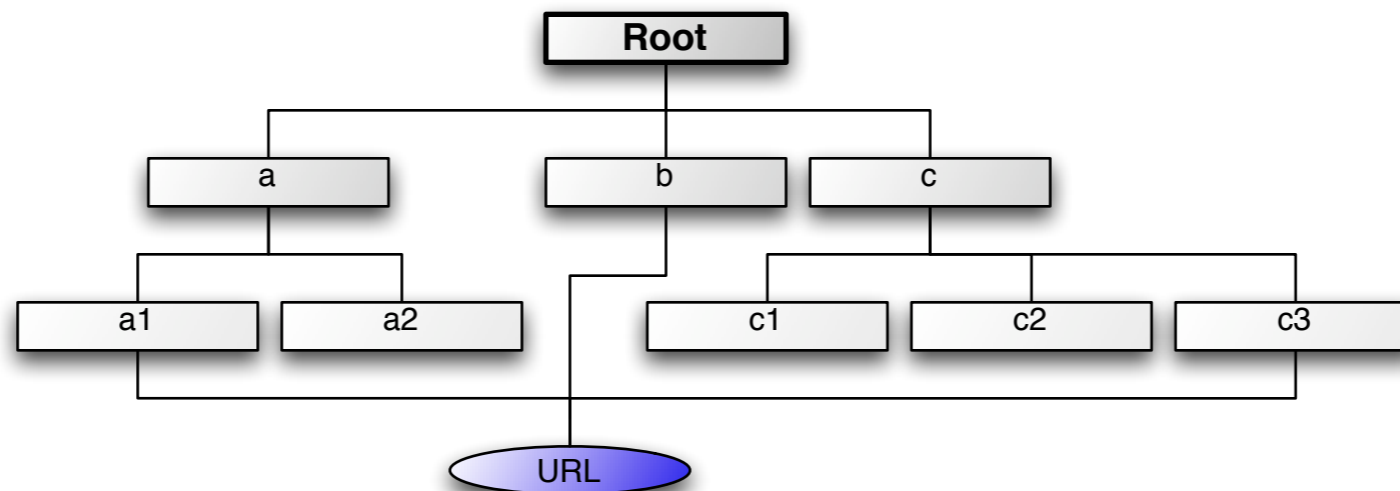
- A bookmarking service with two significant differences:
- A flexible approach to bookmark organization
- A social software component

Flexibility in Organization

- Traditional bookmarks > tree model



- del.icio.us tags > more general graph model



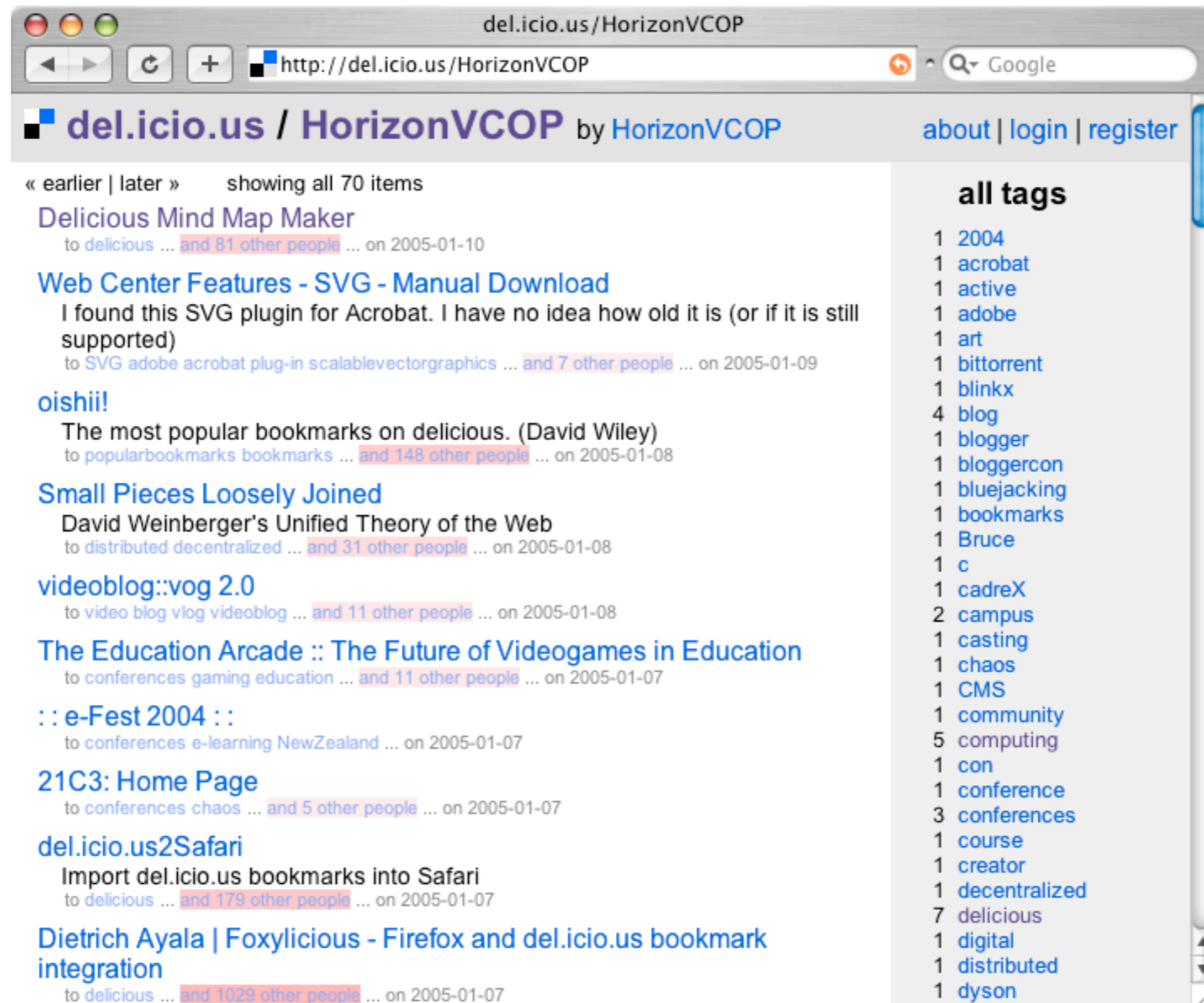
del.icio.us as Social Software

- Three interconnected components:
 - links
 - tags
 - users
- Forms the basis for a folksonomy
 - Folksonomy: folk + taxonomy (Thomas Vander Wal, 2004)
 - Mathes, Adam. Folksonomies - Cooperaative Classification and Communication Through Shared Metadata. December 2004. Online at <http://www.adammathes.com/academic/computer-mediated-communication/folksonomies.html>

Why is del.icio.us so successful?

- It provides **instant feedback** regarding the location of any new link/tag/user addition in the network;
- It is **simple**.

Step 1: the user page



del.icio.us / HorizonVCOP

http://del.icio.us/HorizonVCOP

del.icio.us / HorizonVCOP by HorizonVCOP

about | login | register

« earlier | later » showing all 70 items

Delicious Mind Map Maker
to delicious ... and 81 other people ... on 2005-01-10

Web Center Features - SVG - Manual Download
I found this SVG plugin for Acrobat. I have no idea how old it is (or if it is still supported)
to SVG adobe acrobat plug-in scalablevectorgraphics ... and 7 other people ... on 2005-01-09

oishii!
The most popular bookmarks on delicious. (David Wiley)
to popularbookmarks bookmarks ... and 148 other people ... on 2005-01-08

Small Pieces Loosely Joined
David Weinberger's Unified Theory of the Web
to distributed decentralized ... and 31 other people ... on 2005-01-08

videoblog::vog 2.0
to video blog vlog videoblog ... and 11 other people ... on 2005-01-08

The Education Arcade :: The Future of Videogames in Education
to conferences gaming education ... and 11 other people ... on 2005-01-07

:: e-Fest 2004 ::
to conferences e-learning NewZealand ... on 2005-01-07

21C3: Home Page
to conferences chaos ... and 5 other people ... on 2005-01-07

del.icio.us2Safari
Import del.icio.us bookmarks into Safari
to delicious ... and 179 other people ... on 2005-01-07

Dietrich Ayala | Foxylicious - Firefox and del.icio.us bookmark integration
to delicious ... and 1029 other people ... on 2005-01-07

all tags

- 1 2004
- 1 acrobat
- 1 active
- 1 adobe
- 1 art
- 1 bittorrent
- 1 blinkx
- 4 blog
- 1 blogger
- 1 bloggercon
- 1 bluejacking
- 1 bookmarks
- 1 Bruce
- 1 c
- 1 cadreX
- 2 campus
- 1 casting
- 1 chaos
- 1 CMS
- 1 community
- 5 computing
- 1 con
- 1 conference
- 3 conferences
- 1 course
- 1 creator
- 1 decentralized
- 7 delicious
- 1 digital
- 1 distributed
- 1 dyson

http://del.icio.us/HorizonVCOP

Step 2: the user tag page

The screenshot shows a web browser window with the URL <http://del.icio.us/HorizonVCOP/computing>. The page title is "del.icio.us / HorizonVCOP / computing" and it includes links for "about", "login", and "register".

The main content area displays a list of 5 items, with the first three visible:

- Pervasive Learning September / October 2003 openDOOR**
pervasive
to computing learning pervasive ubiquitous ... on 2004-12-01
- MIT Project Oxygen**
Pervasive
to computing pervasive ... and 3 other people ... on 2004-11-30
- eBiquity.ORG :: An Online Community for Pervasive Computing Enthusiasts**
to computing pervasive ... and 3 other people ... on 2004-11-28

Below these items, there are two more items partially visible:

- Microsoft Research**
social computing sharing video picture blog
to blog computing picture research sharing social video ... and 20 other people ... on 2004-10-22
- HP Labs - Advanced Research at HP**
research
to blog computing picture research sharing social video ... and 1 other person ... on 2004-10-08

Navigation and utility elements include:

- « earlier | later » showing all 5 items
- An RSS feed link: <http://del.icio.us/rss/HorizonVCOP/computing>
- Showing 100 items per page. Show 10, 25, 50, 100 items per page.

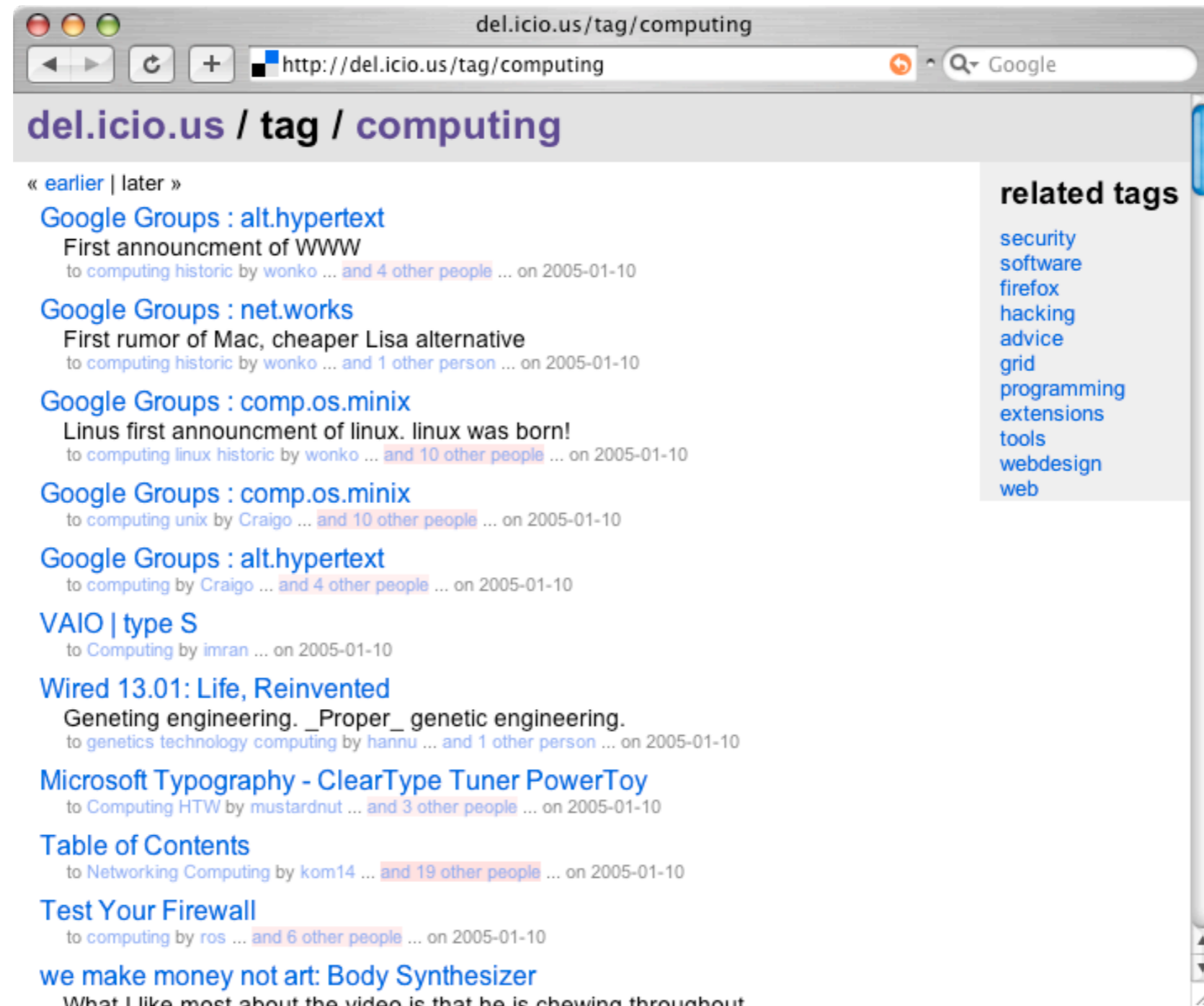
On the right side, there are two columns of tags:

- related tags**
 - 2 blog ...
 - 1 learning ...
 - 3 pervasive ...
 - 2 picture ...
 - 2 research ...
 - 2 sharing ...
 - 2 social ...
 - 1 ubiquitous ...
 - 2 video ...
- all tags**
 - 1 2004
 - 1 acrobat
 - 1 active
 - 1 adobe
 - 1 art
 - 1 bittorrent
 - 1 blinkx
 - 4 blog
 - 1 blogger
 - 1 bloggercon
 - 1 bluejacking
 - 1 bookmarks
 - 1 Bruce
 - 1 c
 - 1 cadreX
 - 2 campus
 - 1 casting
 - 1 chaos
 - 1 CMS
 - 1 community
 - 5 computing
 - 1 con
 - 1 conference
 - 3 conferences
 - 1 course
 - 1 creator
 - 1 decentralized
 - 7 delicious
 - 1 digital
 - 1 distributed
 - 1 dyson

At the bottom of the right column, there is a link: » computing from all users

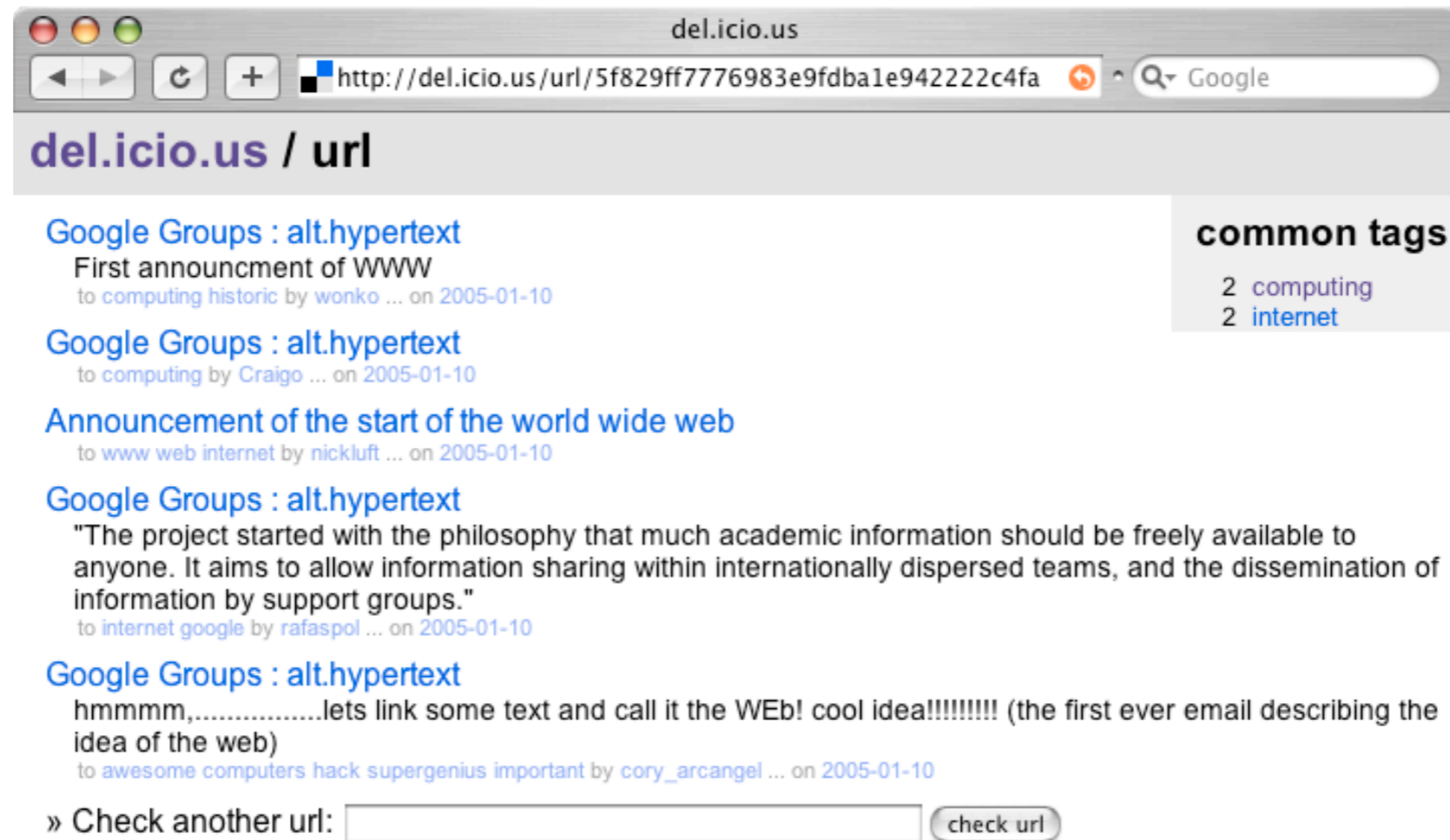
<http://del.icio.us/HorizonVCOP/computing>

Step 3: the cross-user tag page



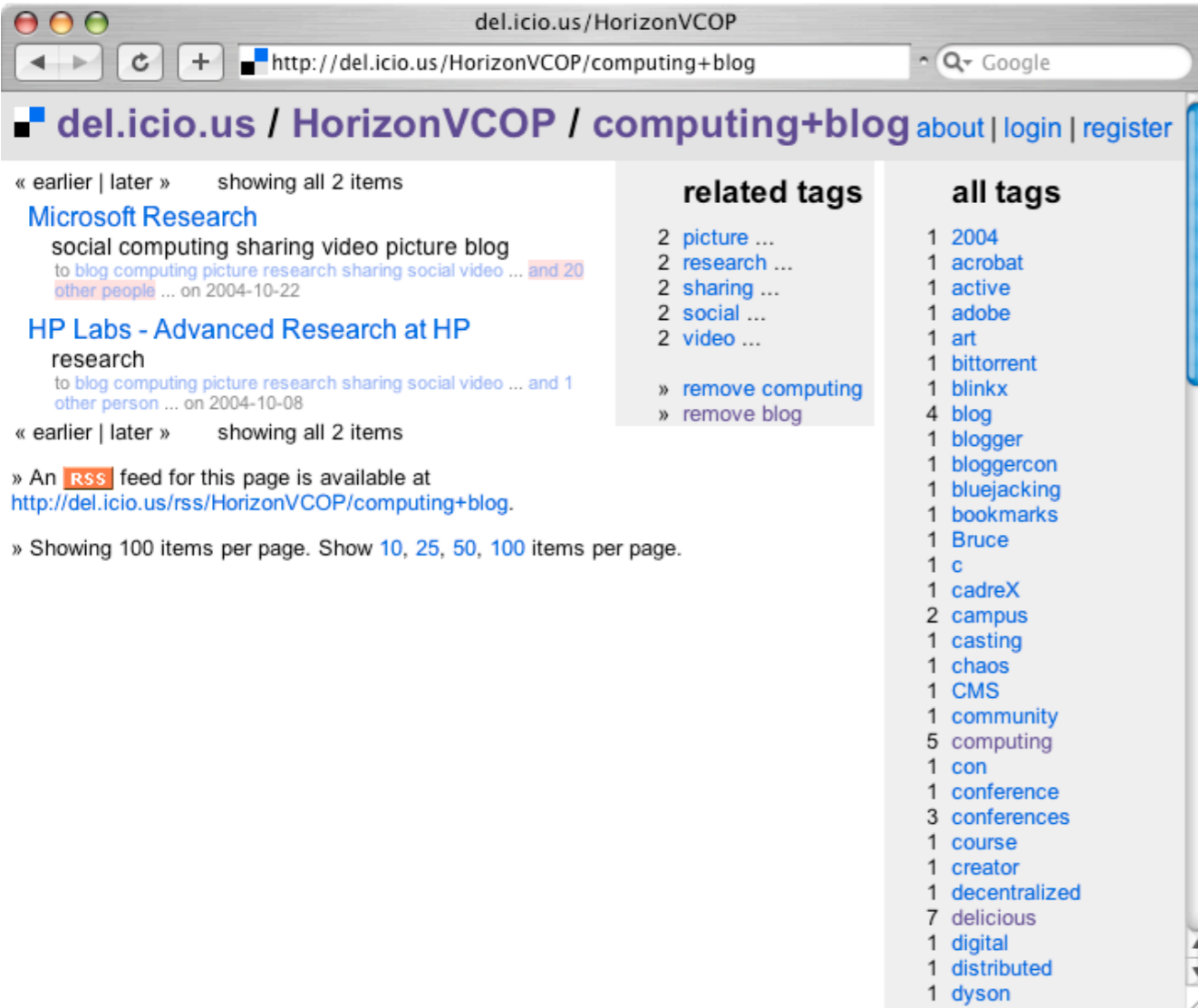
<http://del.icio.us/tag/computing>

Step 4: the site page



<http://del.icio.us/url/5f829ff7776983e9fdb1e942222c4fa>

Coda: the tag intersection page



del.icio.us/HorizonVCOP

http://del.icio.us/HorizonVCOP/computing+blog

del.icio.us / HorizonVCOP / computing+blog about | login | register

« earlier | later » showing all 2 items

Microsoft Research
social computing sharing video picture blog
to blog computing picture research sharing social video ... and 20 other people ... on 2004-10-22

HP Labs - Advanced Research at HP
research
to blog computing picture research sharing social video ... and 1 other person ... on 2004-10-08

« earlier | later » showing all 2 items

» An **RSS** feed for this page is available at
<http://del.icio.us/rss/HorizonVCOP/computing+blog>.

» Showing 100 items per page. Show 10, 25, 50, 100 items per page.

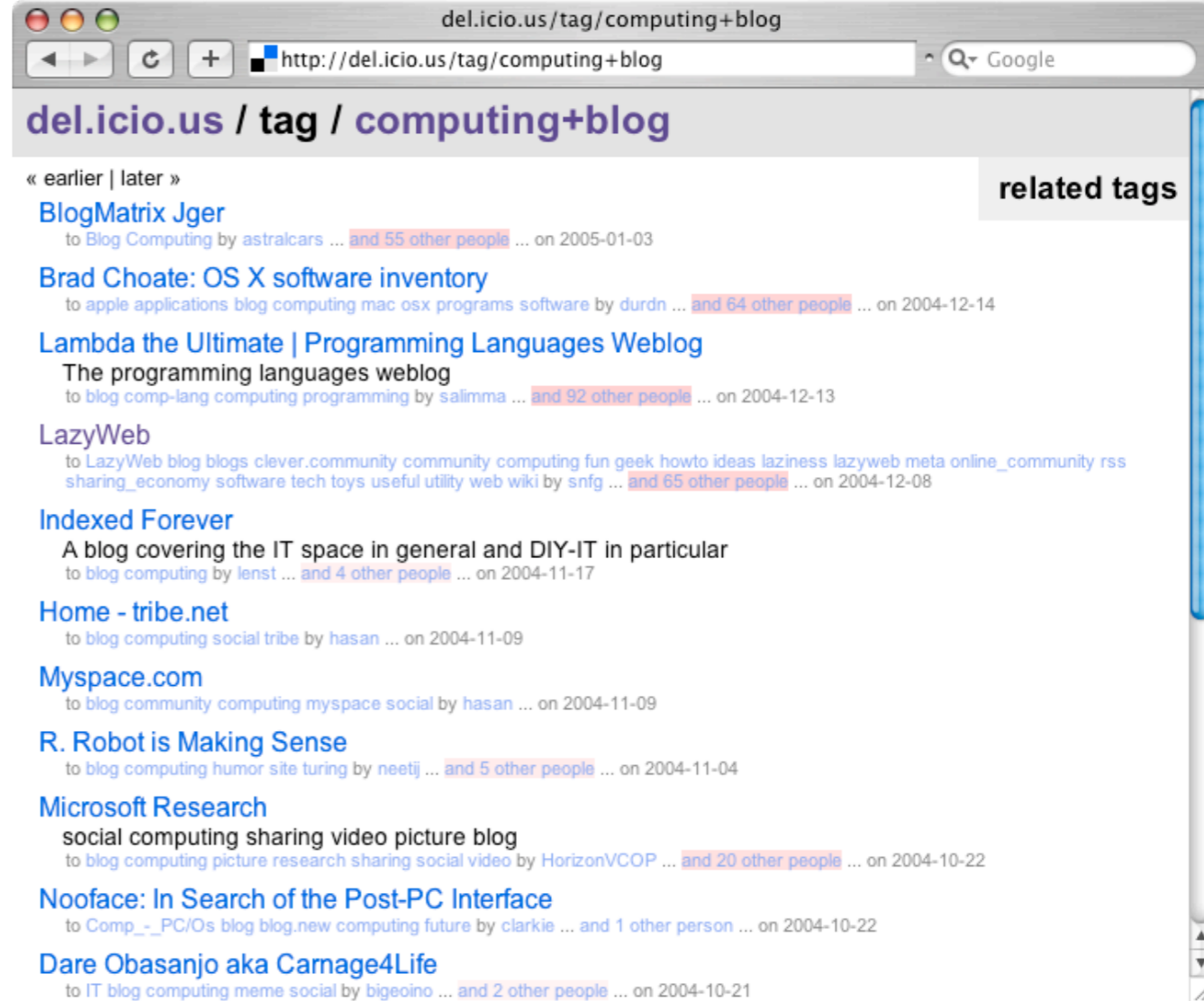
related tags

- 2 picture ...
- 2 research ...
- 2 sharing ...
- 2 social ...
- 2 video ...

» remove computing
» remove blog

all tags

- 1 2004
- 1 acrobat
- 1 active
- 1 adobe
- 1 art
- 1 bittorrent
- 1 blinkx
- 4 blog
- 1 blogger
- 1 bloggercon
- 1 bluejacking
- 1 bookmarks
- 1 Bruce
- 1 c
- 1 cadreX
- 2 campus
- 1 casting
- 1 chaos
- 1 CMS
- 1 community
- 5 computing
- 1 con
- 1 conference
- 3 conferences
- 1 course
- 1 creator
- 1 decentralized
- 7 delicious
- 1 digital
- 1 distributed
- 1 dyson



del.icio.us/tag/computing+blog

http://del.icio.us/tag/computing+blog

del.icio.us / tag / computing+blog

« earlier | later »

related tags

BlogMatrix Jger
to Blog Computing by astralcars ... and 55 other people ... on 2005-01-03

Brad Choate: OS X software inventory
to apple applications blog computing mac osx programs software by durdn ... and 64 other people ... on 2004-12-14

Lambda the Ultimate | Programming Languages Weblog
The programming languages weblog
to blog comp-lang computing programming by salimma ... and 92 other people ... on 2004-12-13

LazyWeb
to LazyWeb blog blogs clever.community community computing fun geek howto ideas laziness lazyweb meta online_community rss sharing_economy software tech toys useful utility web wiki by snfg ... and 65 other people ... on 2004-12-08

Indexed Forever
A blog covering the IT space in general and DIY-IT in particular
to blog computing by lenst ... and 4 other people ... on 2004-11-17

Home - tribe.net
to blog computing social tribe by hasan ... on 2004-11-09

Myspace.com
to blog community computing myspace social by hasan ... on 2004-11-09

R. Robot is Making Sense
to blog computing humor site turing by neetij ... and 5 other people ... on 2004-11-04

Microsoft Research
social computing sharing video picture blog
to blog computing picture research sharing social video by HorizonVCOP ... and 20 other people ... on 2004-10-22

Nooface: In Search of the Post-PC Interface
to Comp_-_PC/Os blog blog.new computing future by clarkie ... and 1 other person ... on 2004-10-22

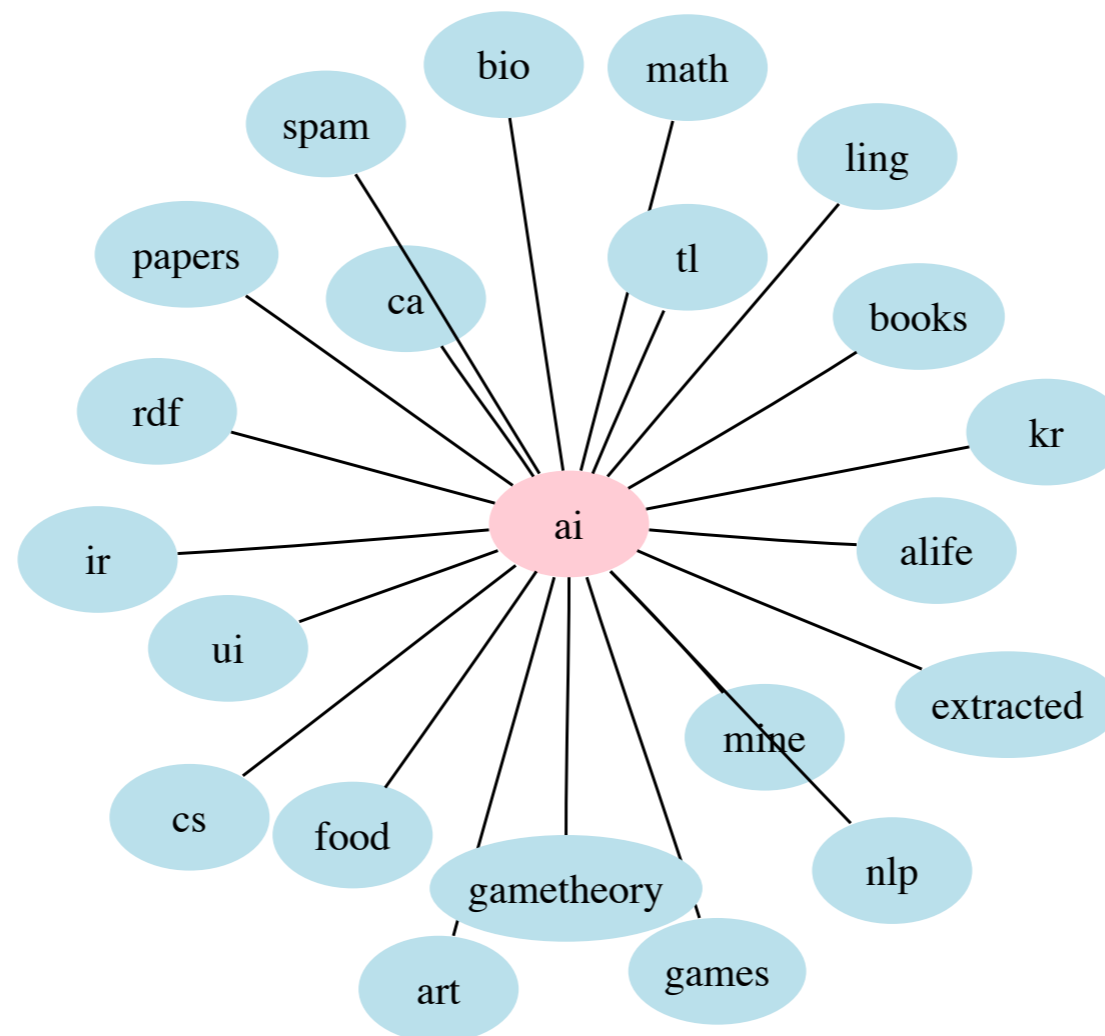
Dare Obasanjo aka Carnage4Life
to IT blog computing meme social by bigeoino ... and 2 other people ... on 2004-10-21

<http://del.icio.us/HorizonVCOP/computing+blog>

<http://del.icio.us/tag/computing+blog>

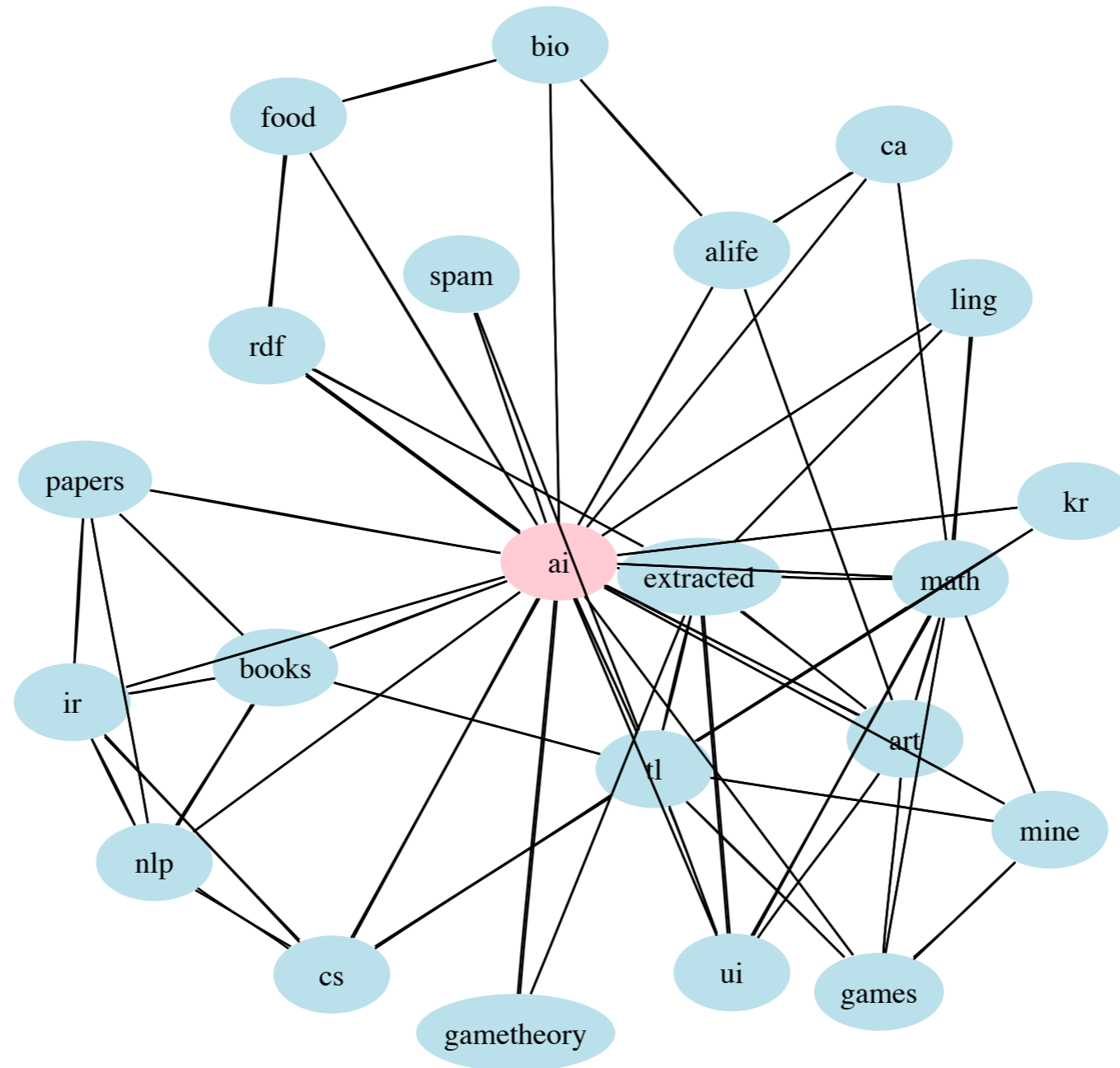
Visualization I:

- Joshua Schachter is the creator of del.icio.us, so he's had a bit of time to refine his use of tags...
- Joshua Schachter and AI on 1/4/05:



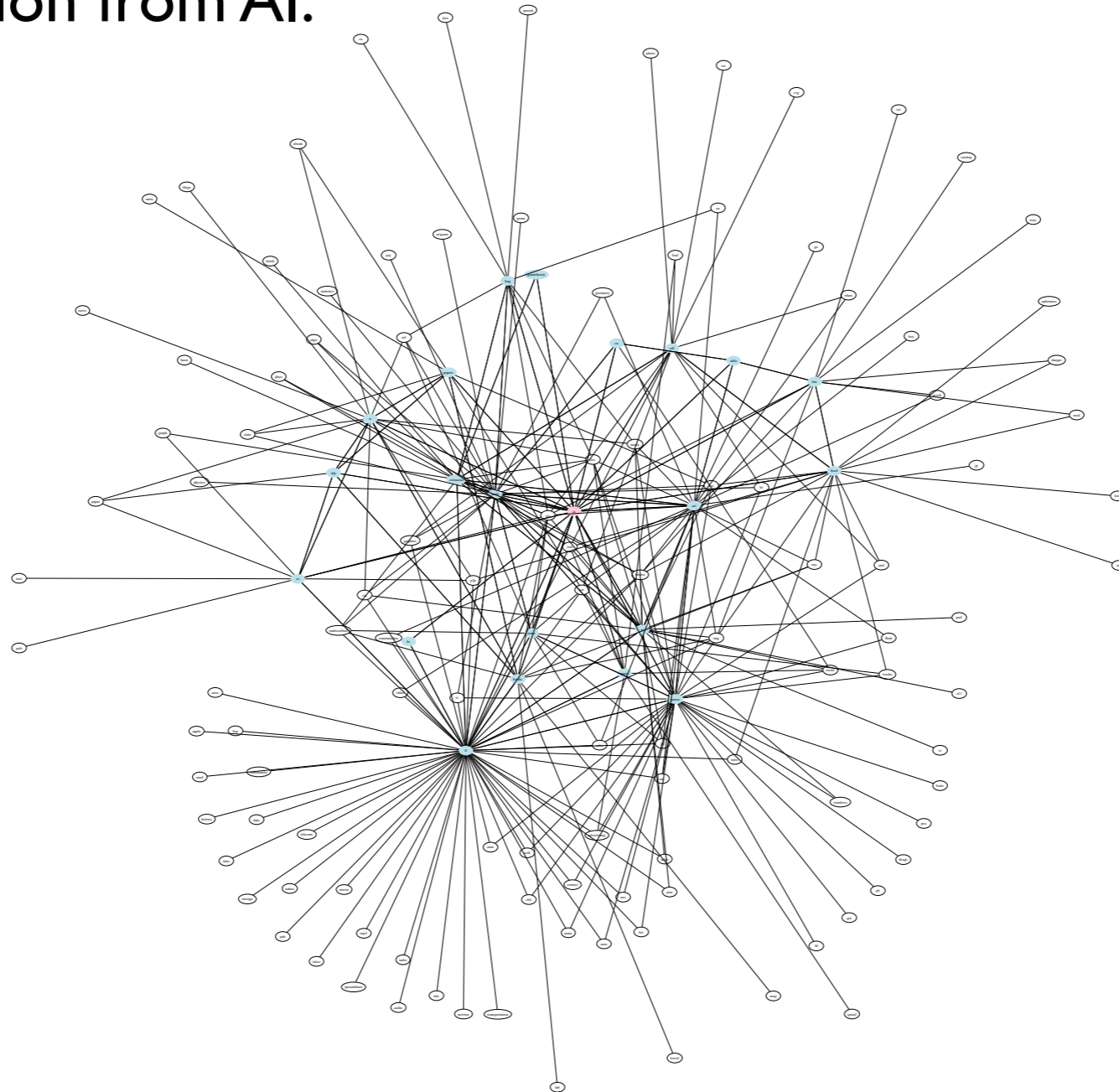
Visualization 2:

- Now, let's include the interconnections between tags:



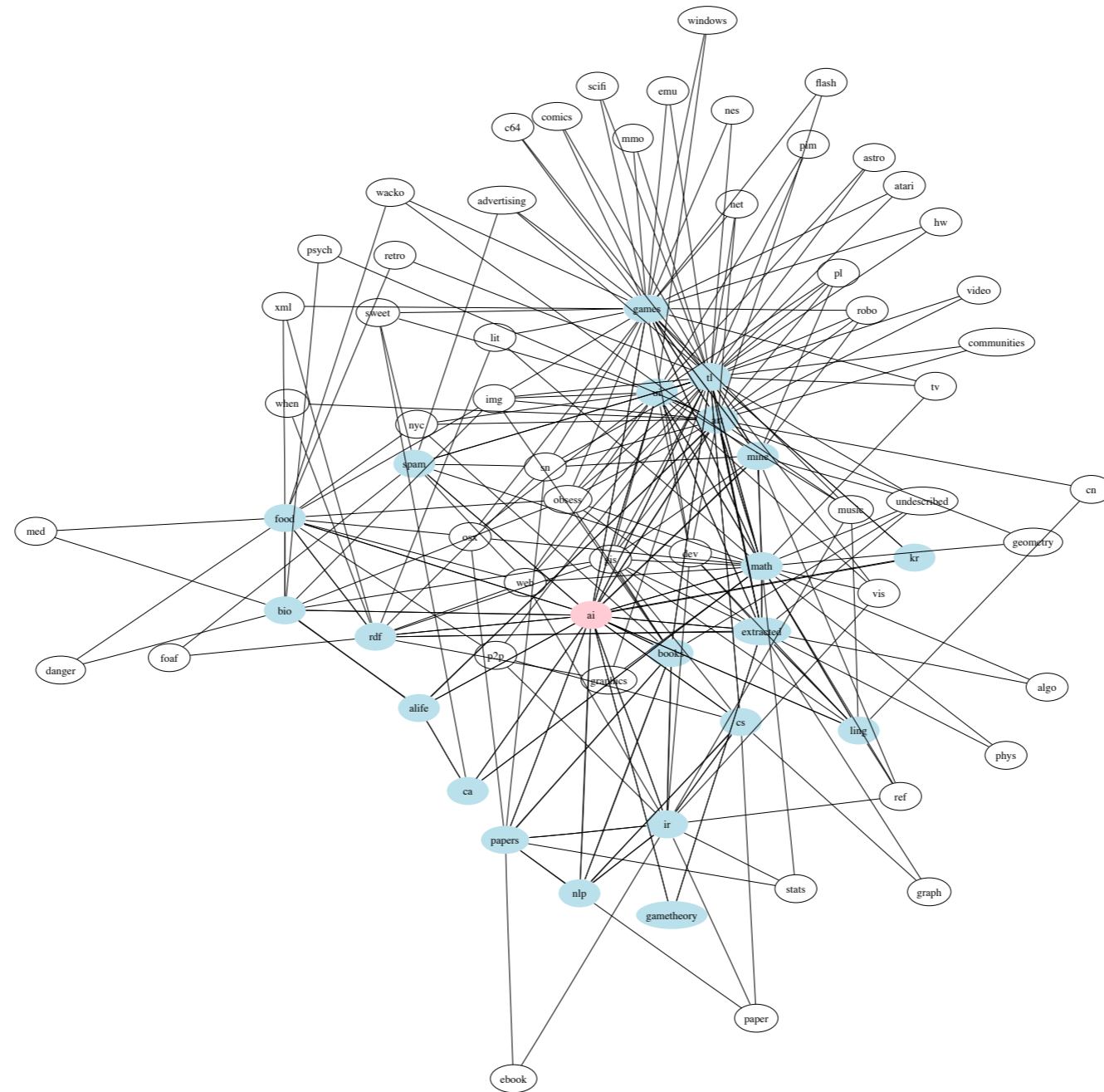
Visualization 3:

- Now, let's include the tags that are at two degrees of separation from AI:



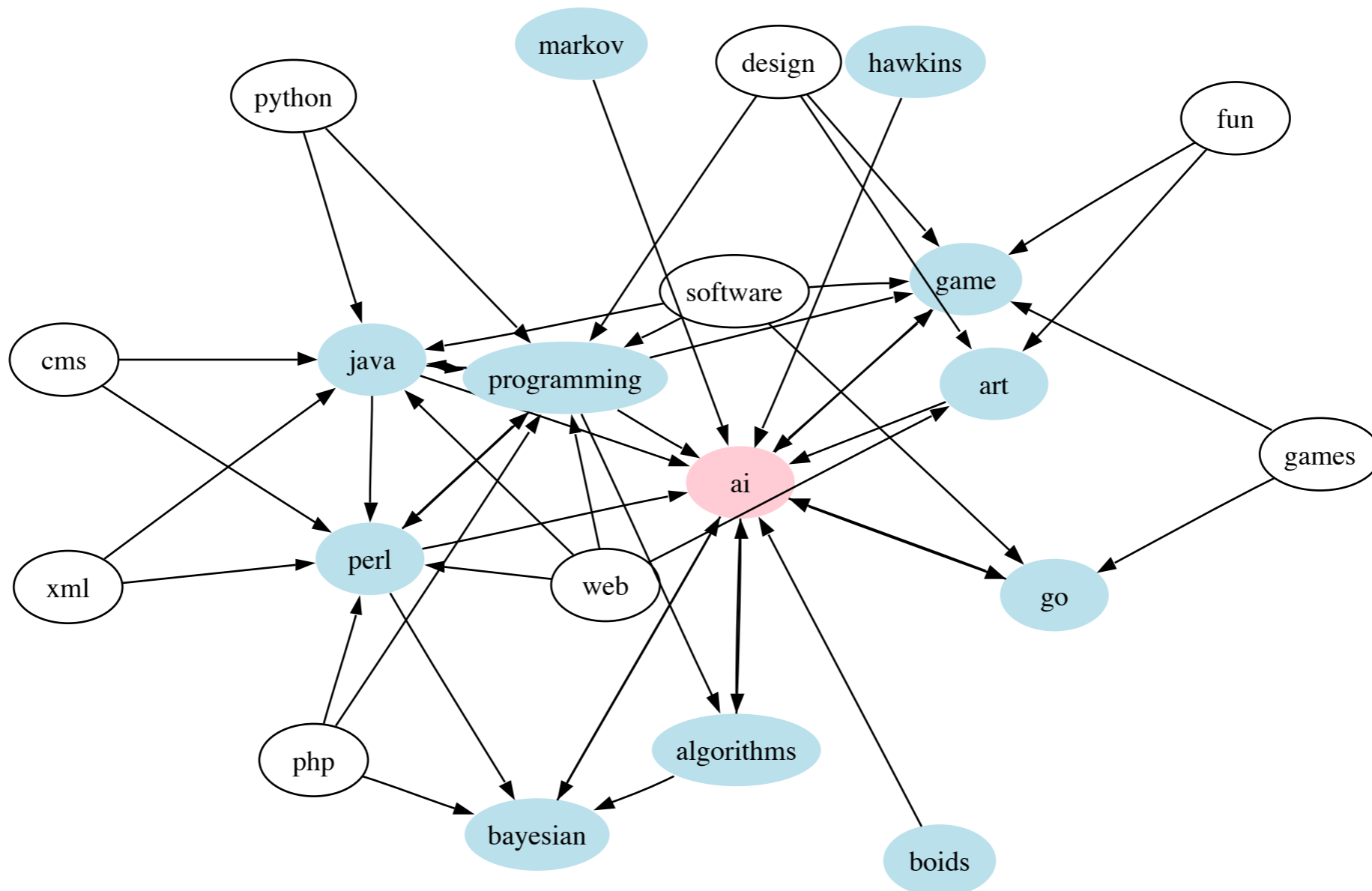
Visualization 4:

- Let's prune that back a bit by eliminating any non-bridging tags:



Visualization 5:

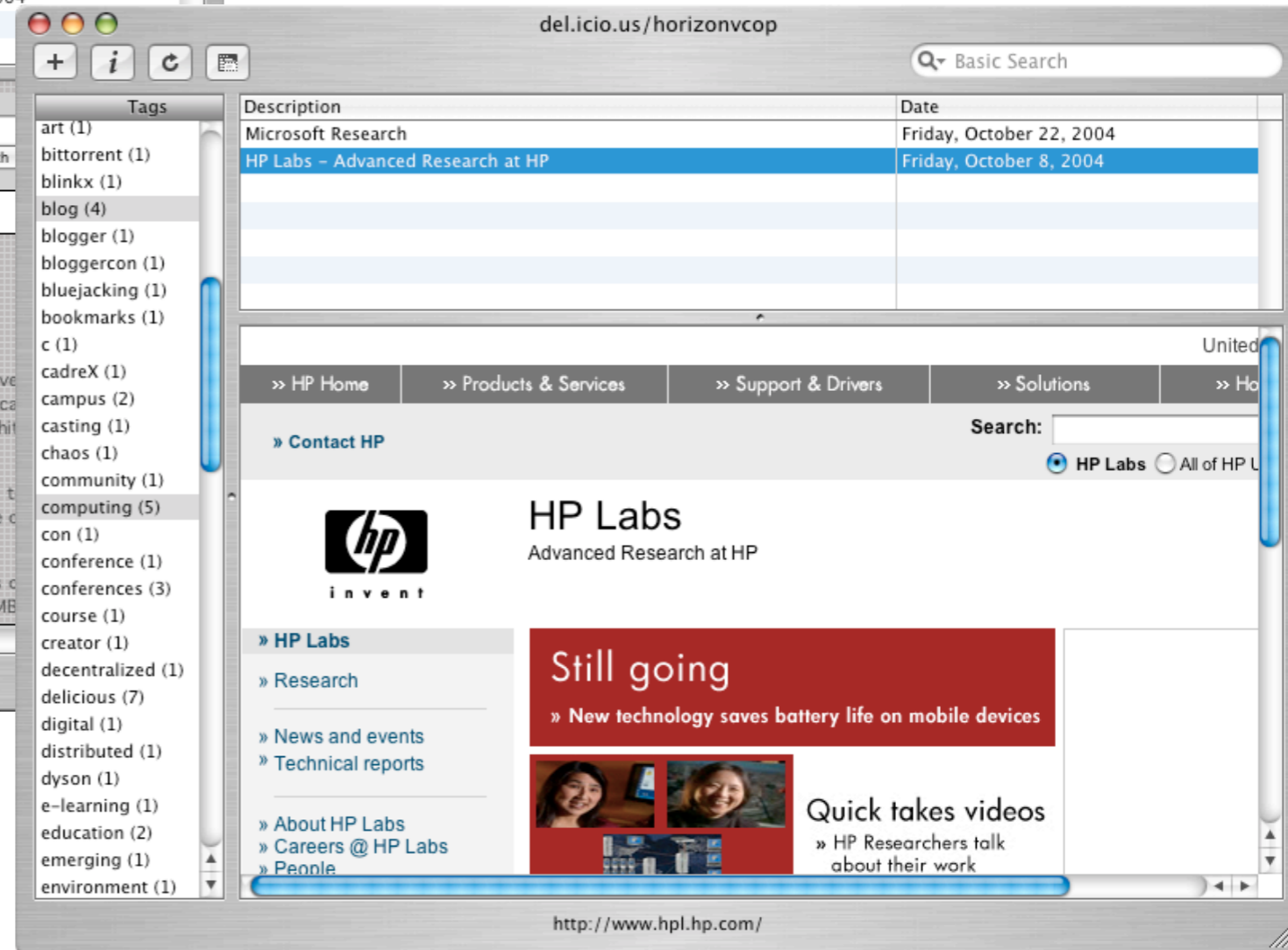
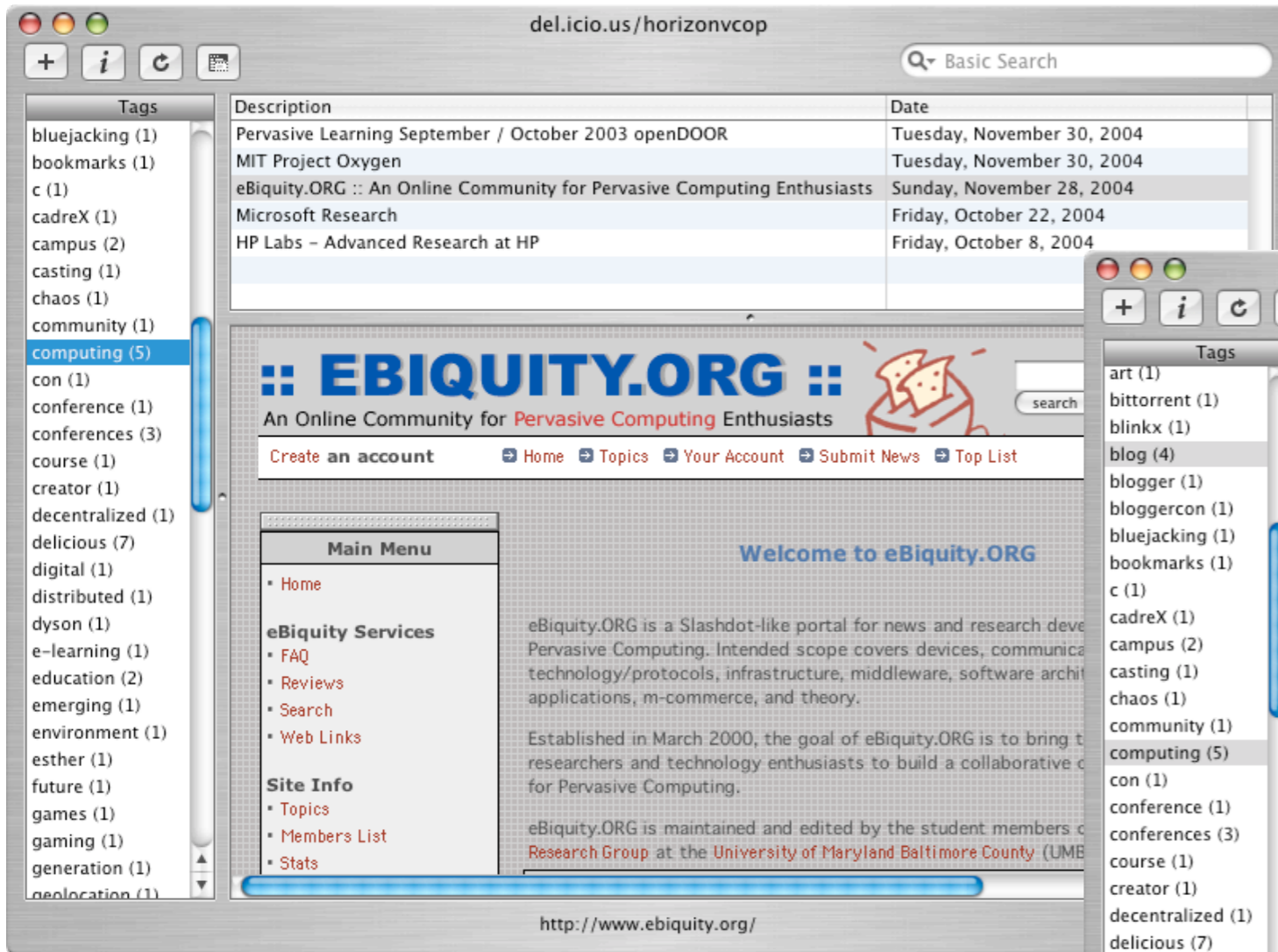
- We can also look at the cross-user tag network surrounding AI:



Two Items to Complement del.icio.us

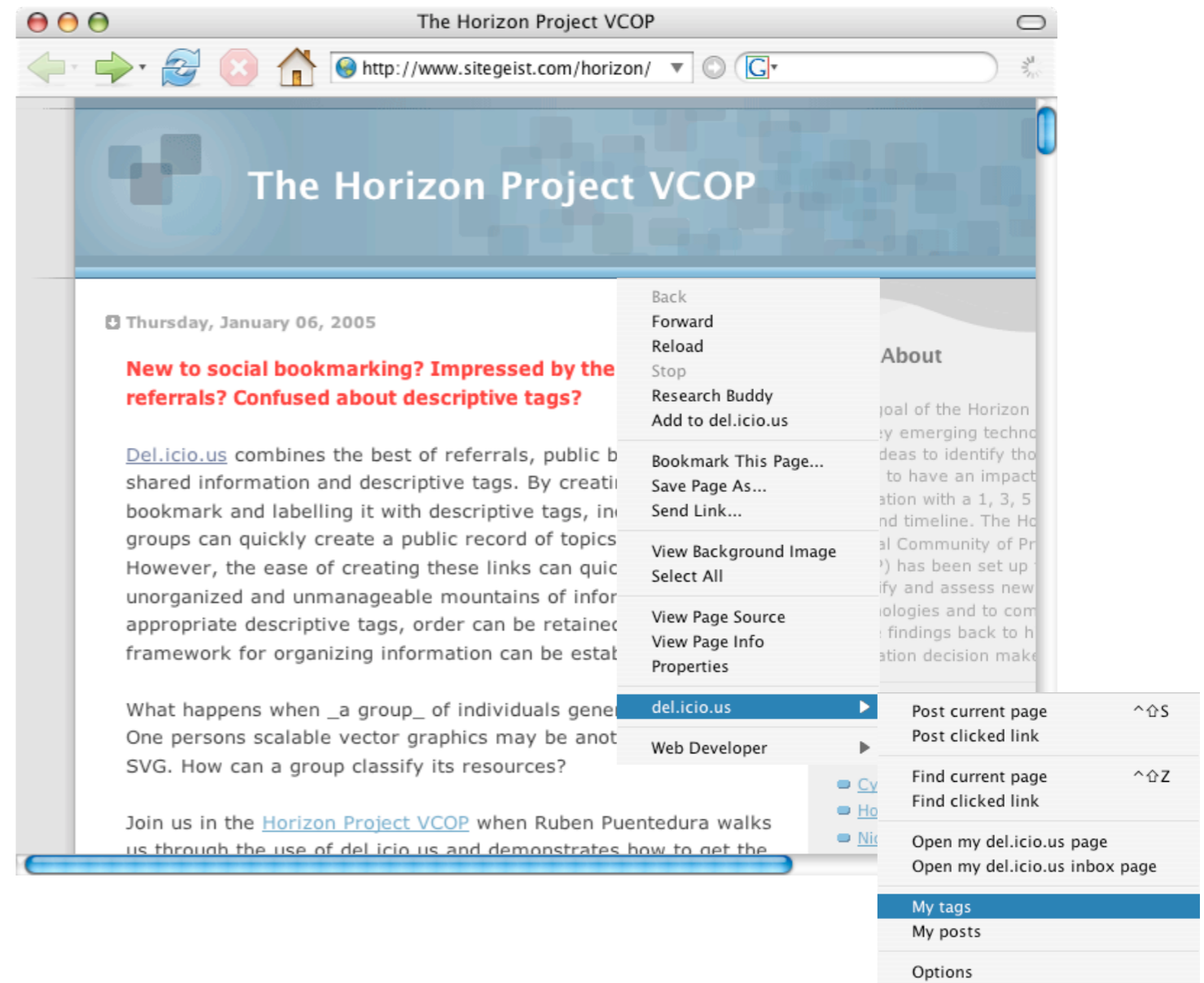
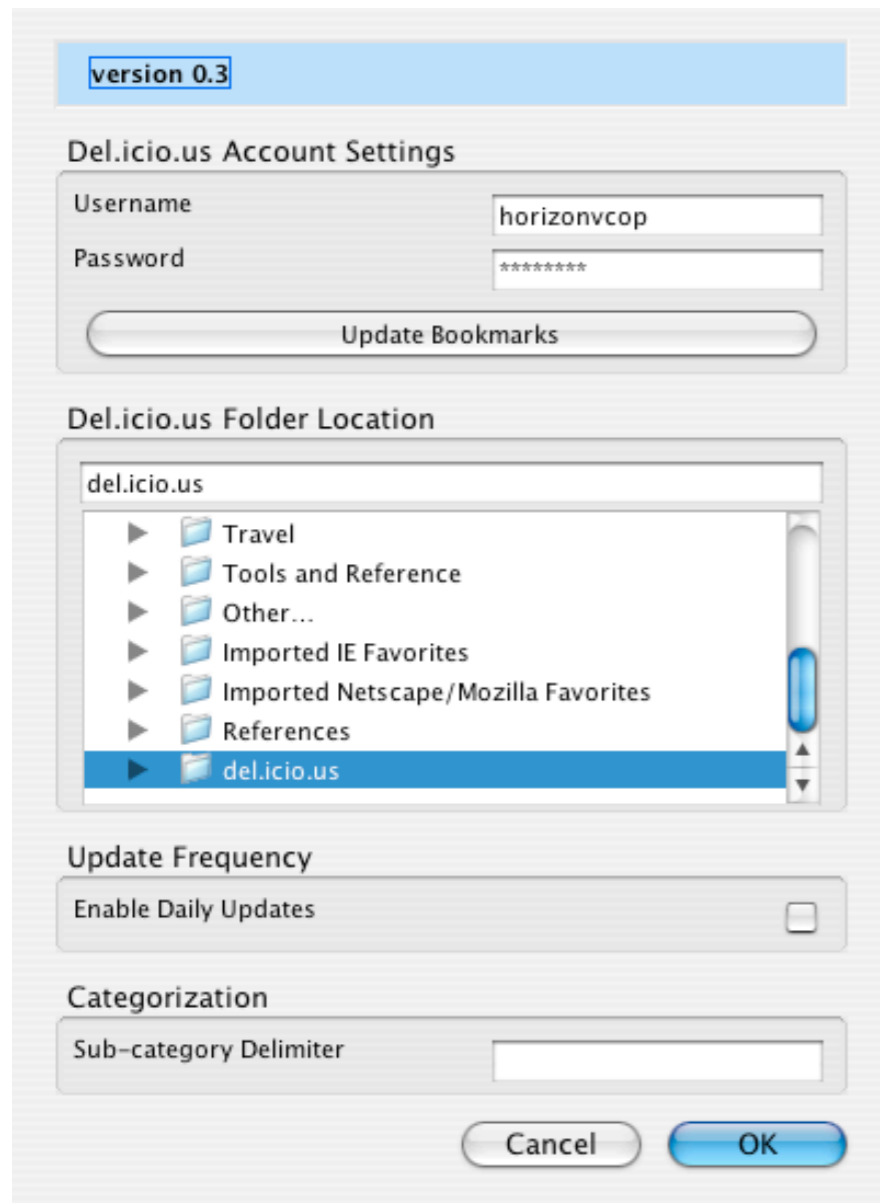
- Good tools
- Good practices

Good Tool #1: Cocoal.icio.us (Mac OS X)



<http://www.scifihifi.com/cocoalicious/>

Good Tool #2: Firefox Plugins: Foxylicious and delicious (Cross-platform)



<http://dietrich.ganx4.com/foxylicious/>
<http://delicious.mozdev.org/>

Good Practice #1

- Try to maintain (reasonable) stylistic consistency.
- For instance: should proper names be capitalized or not?
 - Actual example: Mau vs. dyson

The screenshot displays two del.icio.us profiles side-by-side. The left profile is for 'Mau' and the right is for 'dyson'. Both profiles feature a single item: 'Bruce Mau installation and visionaries speak at Vancouver Art Gallery'. The 'Mau' profile lists related tags as 'Bruce ...', 'Vancouver ...', 'art ...', 'dyson ...', 'esther ...', 'installation ...', and 'visionaries ...'. The 'dyson' profile lists related tags as 'Bruce ...', 'Mau ...', 'Vancouver ...', 'art ...', 'esther ...', 'installation ...', and 'visionaries ...'. The key difference is the capitalization of the name 'Mau' in the 'dyson' profile's tags, which is not capitalized in the 'Mau' profile's tags.

del.icio.us / HorizonVCOP / Mau

« earlier | later » showing all 1 items

[Bruce Mau installation and visionaries speak at Vancouver Art Gallery](#)

to Bruce Mau Vancouver art dyson esther installation visionaries ... and 34 other people ... on 2004-10-17

« earlier | later » showing all 1 items

» An **RSS** feed for this page is available at <http://del.icio.us/rss/HorizonVCOP/Mau>.

» Showing 100 items per page. Show [10](#), [25](#), [50](#), [100](#) items per page.

related tags

- 1 Bruce ...
- 1 Vancouver ...
- 1 art ...
- 1 dyson ...
- 1 esther ...
- 1 installation ...
- 1 visionaries ...

» mau from

del.icio.us / HorizonVCOP / dyson

« earlier | later » showing all 1 items

[Bruce Mau installation and visionaries speak at Vancouver Art Gallery](#)

to Bruce Mau Vancouver art dyson esther installation visionaries ... and 34 other people ... on 2004-10-17

« earlier | later » showing all 1 items

» An **RSS** feed for this page is available at <http://del.icio.us/rss/HorizonVCOP/dyson>.

» Showing 100 items per page. Show [10](#), [25](#), [50](#), [100](#) items per page.

related tags

- 1 Bruce ...
- 1 Mau ...
- 1 Vancouver ...
- 1 art ...
- 1 esther ...
- 1 installation ...
- 1 visionaries ...

» dyson from all users

Good Practice #2

- Think carefully about the appropriate degree of fragmentation for your tags.
- For instance: should you have both acronyms and the words that make them up?
 - Actual example: SVG vs. scalablevectorgraphics vs. Scalable Vector Graphics

The image displays four overlapping screenshots of del.icio.us tag pages, illustrating the fragmentation of tags for the same concept (Scalable Vector Graphics).

- Top Left:** [del.icio.us / HorizonVCOP / SVG](#). Shows 3 items. Related tags include GIS, acrobat, adobe, plug-in, and scalablevectorgraphics.
- Top Right:** [del.icio.us / HorizonVCOP / Scalable](#). Shows 1 item. Related tags include 2004 and Graphics.
- Middle Right:** [del.icio.us / HorizonVCOP / Vector](#). Shows 1 item. Related tags include 2004, Graphics, Scalable, and horizon.
- Bottom Left:** [del.icio.us / HorizonVCOP / scalablevectorgraphics](#). Shows 1 item. Related tags include SVG, acrobat, adobe, plug-in, and scalablevectorgraphics.
- Bottom Right:** [del.icio.us / HorizonVCOP / Graphics](#). Shows 1 item. Related tags include 2004, Scalable, Vector, horizon, and graphics.

The screenshots demonstrate that different tag names (acronyms vs. full names) are used to describe the same concept, leading to fragmentation. The 'related tags' section on each page shows how these different tags are interconnected.

Good Practice #3

- Having too few tags can be bad - but so is having too many.
- For instance: do you need both the first name and last name of a person that provides the basis for a tag?
 - Actual example: Bruce Mau vs. Mau

del.icio.us / HorizonVCOP / Bruce

« earlier | later » showing all 1 items

[Bruce Mau installation and visionaries speak at Vancouver Art Gallery](#)
to Bruce Mau Vancouver art dyson esther installation visionaries ... and 34 other people ... on 2004-10-17

« earlier | later » showing all 1 items

» An [RSS](#) feed for this page is available at <http://del.icio.us/rss/HorizonVCOP/Bruce>.

» Showing 100 items per page. Show [10](#), [25](#), [50](#), [100](#) items per page.

related tags

- 1 Mau ...
- 1 Vancouver ...
- 1 art ...
- 1 dyson ...
- 1 esther ...
- 1 installation ...
- 1 visionaries ...

» [bruce](#) from all users

del.icio.us / tag / bruce

« earlier | later » **related tags**

- [Engaged: Conference: inkwell.vue, Topic 234](#)
to interview bruce sterling well by jhc ... and 10 other people ... on 2005-01-05
- [Engaged: Conference: inkwell.vue, Topic 234](#)
to bruce sterling by bryce ... and 10 other people ... on 2005-01-04
- [Bruce Eckel's MindView, Inc: 5-2-03 Strong Typing vs. Strong Testing](#)
to bruce essay testing by manasgarg ... and 10 other people ... on 2004-12-30
- [ICONIC TURN - Videostream Iconic Turn Lecture 13.12.2004](#)
to Bruce Speaks Sterling by acerier ... and 29 other people ... on 2004-12-18
- [ICONIC TURN - Videostream Iconic Turn Lecture 13.12.2004](#)
to Bruce Sterling Video by evdg ... and 29 other people ... on 2004-12-17
- [Bruce Eckel's MindView, Inc: Master Index](#)
to blog bruce daily eckel java programming by bayesianinstinct ... and 16 other people ... on 2004-12-15
- [Options](#)
to Bruce by lannais ... on 2004-12-14
- [Incomplete Manifesto](#)
to bruce design growth manifesto mau by aperevolution ... and 48 other people ... on 2004-12-11
- [InfoWorld: Bruce Perens: When open source makes sense: December 03, 2004: By Neil McAllister : APPLICATIONS : DATA_MANAGEMENT : PLATFORMS : STANDARDS : STORAGE](#)
to IT analysis article bruce interesting open open-source perens risk source by srsy ... and 2 other people ... on 2004-12-05

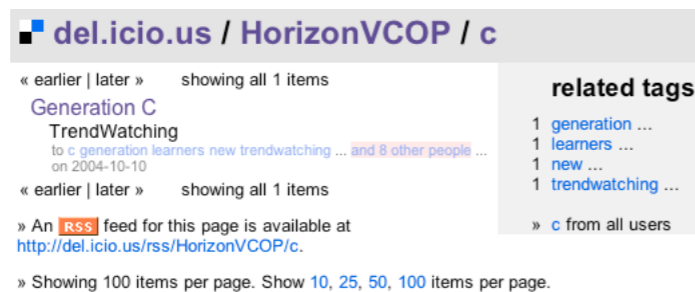
[print footer](#)

Hello, My classlib is 10.1. My problem is that with Paper size setup for 8.5 X 11 inches and bottom margin set up for 1 inch, the text in the footer are clipped off on the bottom when I print on 8.5 X 11 inch paper. Thanks Bruce

to .net activex asp asp.net basic bmp bottom bruce c# classlib clipped control cpp doc dotnet footer gif hello inches jpeg margin paper pdf png print problem programming rtf setup text thanks tiff tx btext btextcontrol vb visual wmf word xml by ctw ... on 2004-12-04

Good Practice #4

- It is worthwhile to take a look at how the del.icio.us community is tagging URLs.
- For instance: is there a good reason for you to use a tag in a way that differs substantively from the way it is used by most people?
- Actual example: HorizonVCOP c vs. community c



del.icio.us / HorizonVCOP / c

« earlier | later » showing all 1 items

Generation C
TrendWatching
to c generation learners new trendwatching ... and 8 other people ... on 2004-10-10

« earlier | later » showing all 1 items

» An **RSS** feed for this page is available at <http://del.icio.us/rss/HorizonVCOP/c>.

» Showing 100 items per page. Show 10, 25, 50, 100 items per page.

related tags

- 1 generation ...
- 1 learners ...
- 1 new ...
- 1 trendwatching ...

» c from all users



del.icio.us / tag / c

« earlier | later »

Quick Reference Cards
to programming java c++ sql uml xml cvs c jsp by aksella ... and 764 other people ... on 2005-01-10

SWIG: Simplified Wrapper and Interface Generator
to programming development embedding cross-platform c c++ python java ruby php opensource by benDOT ... and 20 other people ... on 2005-01-10

Jlatex2html, Texi2html で作った manual 集
to c tex gnuplot shell mew perl lisp by sora ... on 2005-01-10

C/C++ Reference
to c c++ by sora ... and 79 other people ... on 2005-01-10

FAQs
to c shell tex by sora ... on 2005-01-10

Index of /~seanc/libmemcache
to c programming by jordanh ... and 1 other person ... on 2005-01-10

C 言語入門
to c by sora ... on 2005-01-10

Guide to Pyrex
to python c programming by manfred ... and 2 other people ... on 2005-01-10

Object Orientated Programming with ANSI C book using an awk preprocessor
to awk c oop book by ralph.corderoy ... on 2005-01-10

Beej's Guide to Network Programming
to c network by petere ... and 31 other people ... on 2005-01-10

Simplified Wrapper and Interface Generator
to c c++ library programming wrapper by nicoe ... and 20 other people ... on 2005-01-10

Const and volatile
to programming c by manugarg ... on 2005-01-09

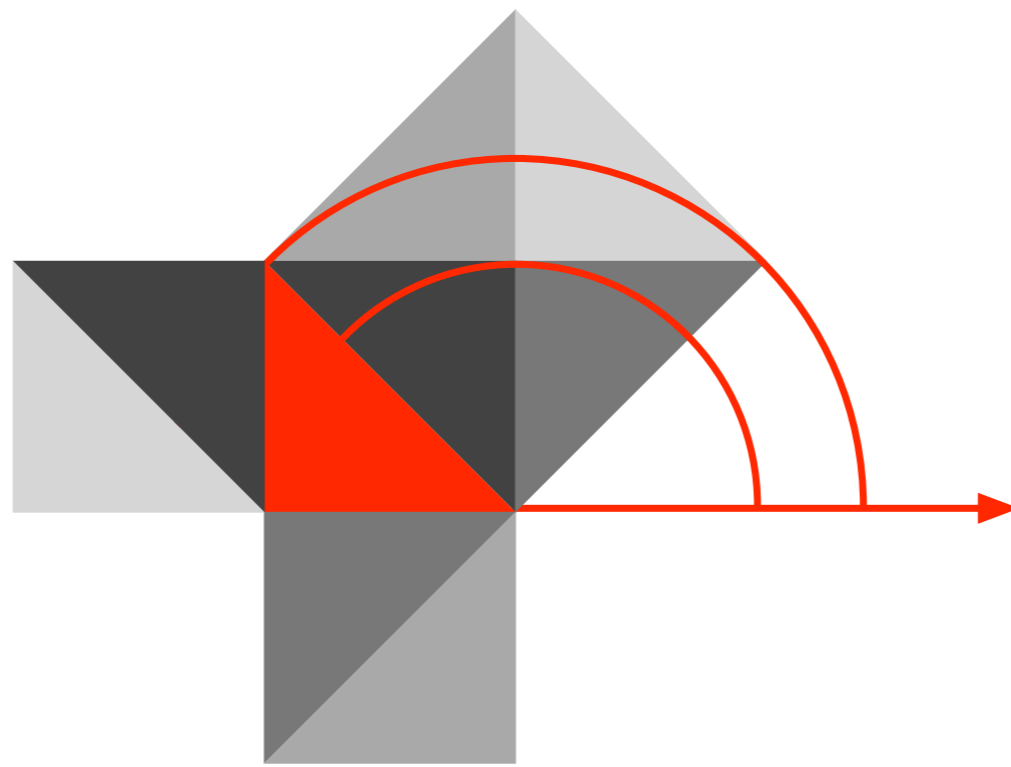
related tags

- programming
- c++
- unix
- perl
- java
- book
- sql
- linux
- xml
- doc++
- uml

How can these practices best be implemented in a shared del.icio.us account?

- One possibility: assign someone to become a "tag editor" - not necessarily the best approach, because:
 - The tag editor has to assume a (not inconsiderable) burden;
 - The knowledge present in the group that went into the original tag creation is replaced by the subset of that knowledge present in the tag editor.
- An alternative: set up a periodic voting process to cull and refine tags:
 - The burden is fairly shared by all;
 - The knowledge present in the group is not lost;
 - The process of voting on the tags in and of itself can enhance the knowledge present in the group and in each one of its members.

Hippasus



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- rubenrp@hippasus.com