

# Re-decentralising the web

Reducing our dependence on centralised platforms and services



## IndieWeb





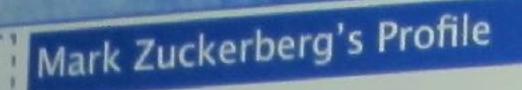


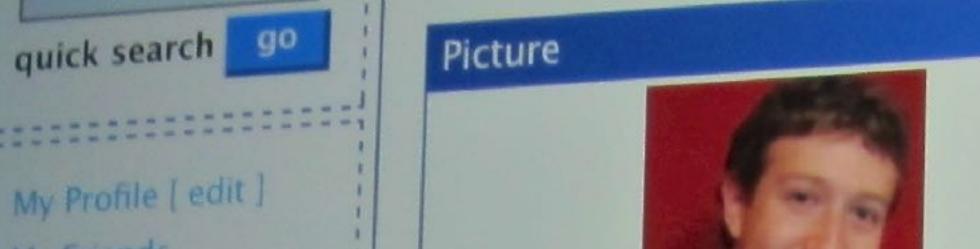
## the centralised/corporate web



## What represents the centralised web?

### **Puget Sound**





My Friends My Parties

My Profile [ edit ]

Niall Kennedy https://flic.kr/p/apNav2

My Messages

My Account

My Privacy



Send Mark a Message

Poke Him!

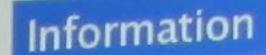
Connection

This is you.

00



You have 19 friends in comm



Account Info:

Mark Zuckerberg Name:

The beginning (February 4, 2004) Member Since:

July 19, 2005 Last Update:

Basic Info:

Harvard School

Student Status:

Male Sex:

Todd 311 Residence:

May 14, 1984 Birthday:

Dobbs Ferry, NY Home Town:

Phillips Exeter Academy High School:

Contact Info:

mzuckerb@ Email:

zberg0 Screenname:

Mobile:

https://www.flickr.com/photos/niallkennedy/6176497431/

ard.edu

### Silos

"A centralised web site typically owned by a for-profit corporation that stakes some claim to content contributed to it"

**Full definition** 

indieweb.org/silo

# Low barrier to entry

# Addictive & compelling

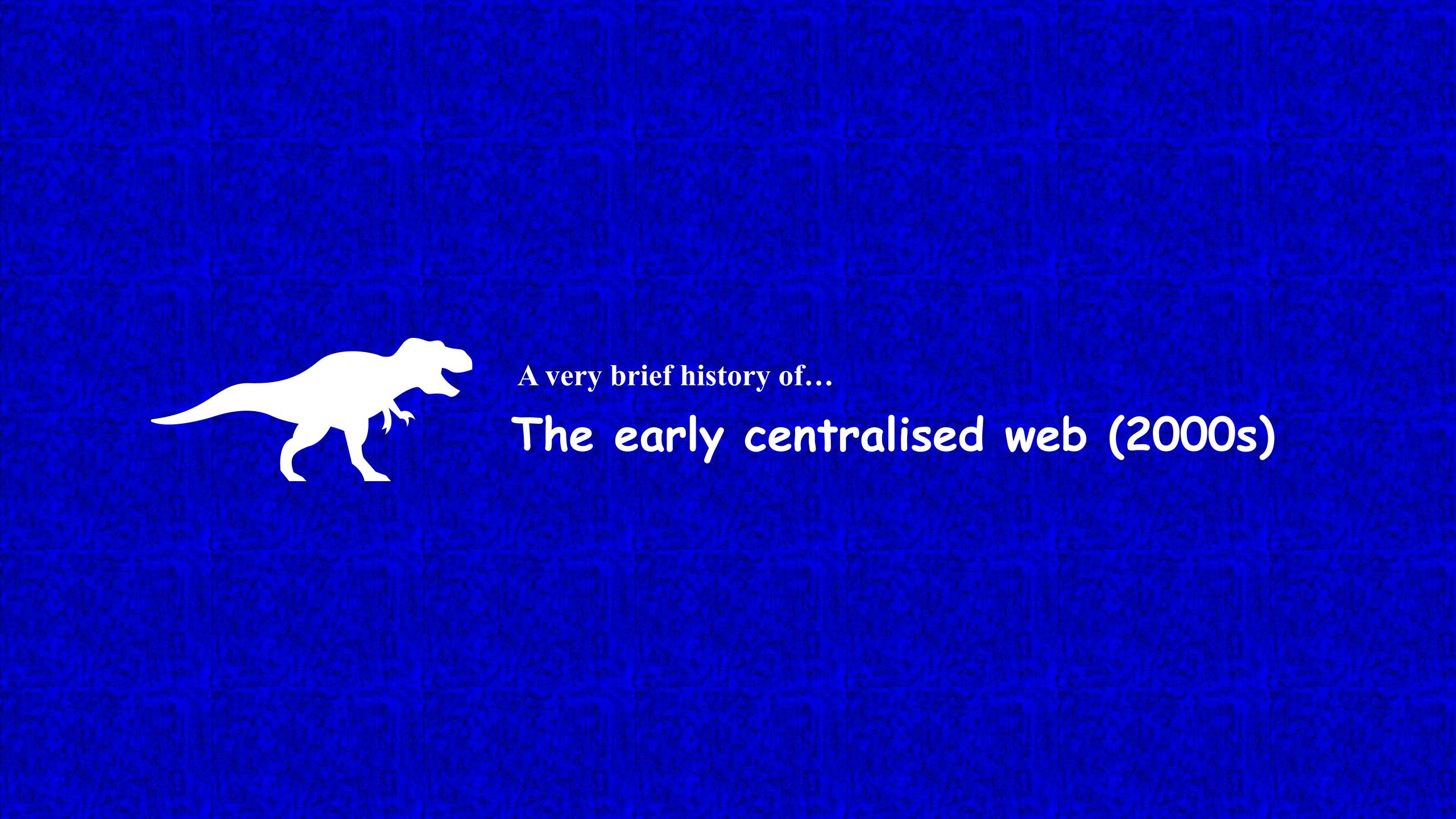
# user generated content

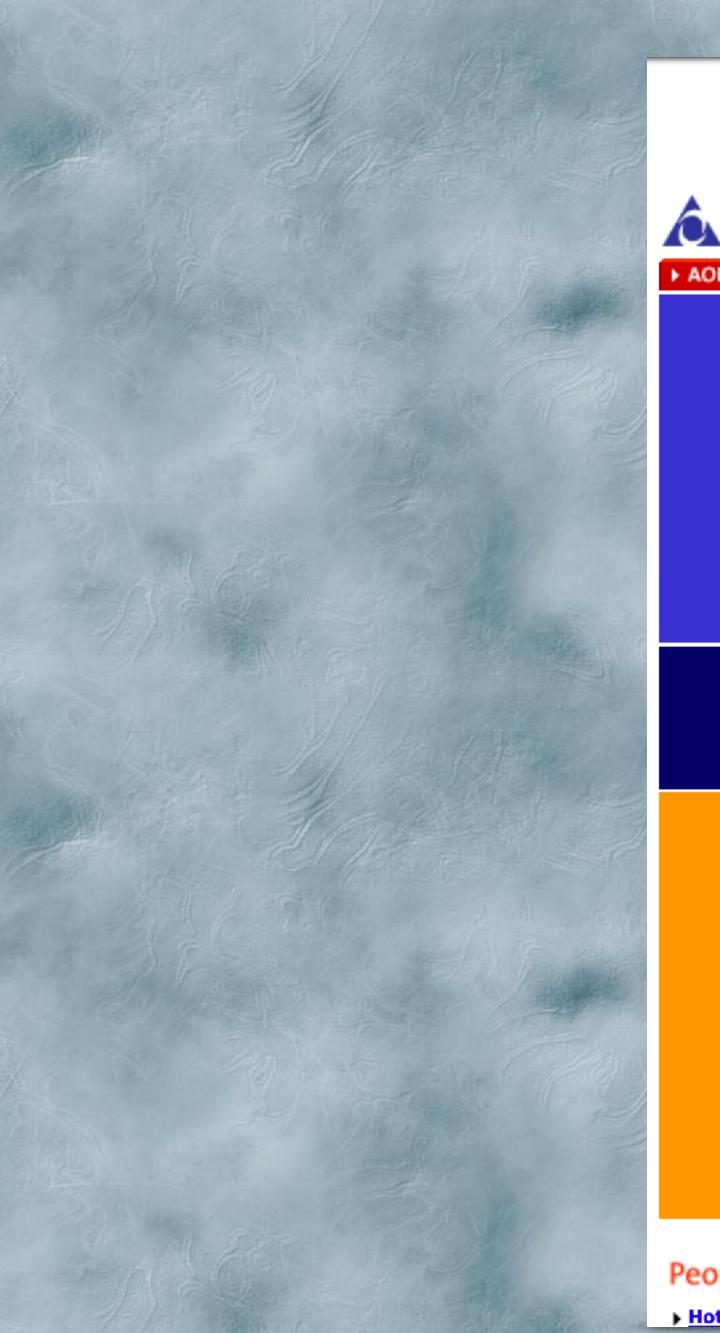
# Enter the Mega silos



# single point of failure

# limited/no data portability















**NEW! - My AOL.COM: Now You Can Customize** News, Weather, Stocks & More.

► AOL Mail ► My AOL.COM ► People/Chat ► Search

▶ Shop

▶ Web Centers → Try AOL FREE! Friday, March 3, 2000

### **AOL Anytime, Anywhere**

**Check Your AOL Mail** 



Enter AOL Screen Name: Enter Password:



≕ Go

- Simplify Your Life My Calendar
- Personalize AOL.COM My AOL.COM

- ▶ Connect With Friends **AOL Instant Messenger** Quick Buddy
- Web Chat

### Search

Search

White Pages | Yellow Pages | Categories Searches: Maps | E-mail Finder | Home Pages | Kids Only

### Shop

- ▶ 2.9% Intro APR\* Visa, Plus Free Month AOL.
- Own a copy of the Oscar-nominated script Magnolia.
- MVP.com -- Grand Opening Sale -- \$10 OFF \$50.

#### **Great Stores:**

Bid.com **GapKids** CarParts.com **ONSALE** 

Zappos.com RedRocket

#### J&R.com; Food.com <u>NewLine</u>

<u>MagazineOutlet</u> gamestop!com CollectiblesToday

### **Hot Spots:**

Art & Antiques <u>Auctions</u> Computing **Software** 

More Stores ▶

### People & Chat

▶ Hot Chats: Romance, Britney Spears, Celebrities, Music

### **Daily Essentials**

#### TOP NEWS:

- Gen. Pinochet Arrives in Chile
- Bush, McCain Squabble Over Money

<u>Weather</u> <u>Horoscopes</u> Sports Scores Classifieds Stock Portfolio

**Hot Chats** Love@AOL Home Pages Free Greetings AOL 5.0 FREE

Symbol Lookup

STOCK QUOTE:

Get Quote



#### See New Cars

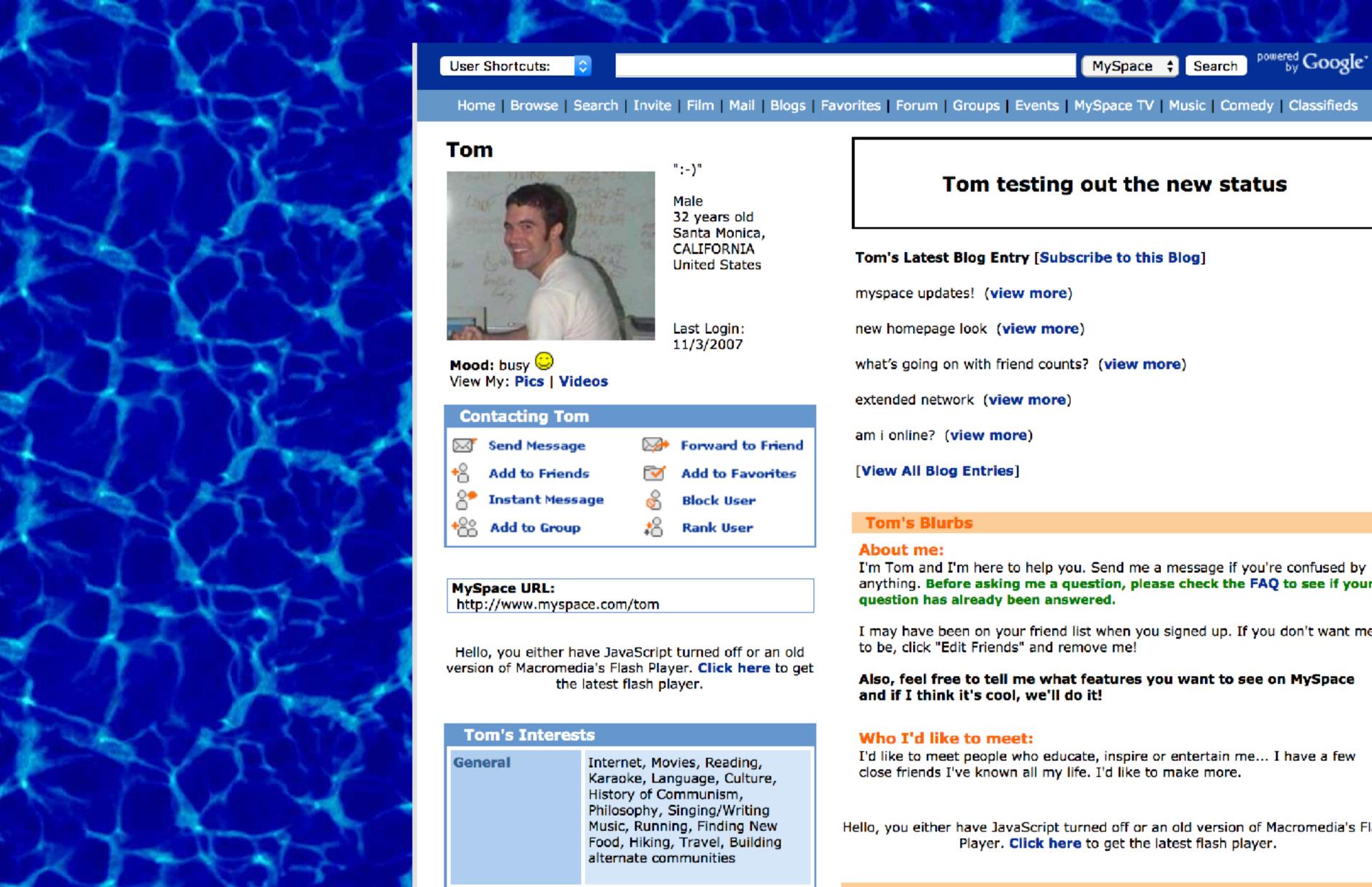
 Concept Car Gallery **New Car Reviews** Used Car Search

#### Web Centers

- Autos: New Cars, Used Cars...
- .Bus. & Careers: Job Listings...
- .Computing: Screensavers...
- .Entertainment: TV, Movies ... .Food: Recipes, Quick Meals...
- .Games: Demos, Game Tips...
- .Govt.: Elections, DMV Forms...
- .Health: Babies, Conditions ...
- .International: Newspapers...

.Home & Garden: Floor Plans...

- Legal: Find A Lawyer ...
- Local: Events, Visitor's Guides...
- .News: Comics, Crosswords...
- Personal Finance: Stocks, Taxes...



Bands: Beatles, Superdrag, Jackson 5, Weezer, Sex Pistols,

Radiohead, Teenage Fanclub,

Oasis, Rialto, Supergrass,

Rocket from the Crypt, Pitchfork,

The Carpenters, Vain,

Music

I'm Tom and I'm here to help you. Send me a message if you're confused by anything. Before asking me a question, please check the FAQ to see if your

I may have been on your friend list when you signed up. If you don't want me

Also, feel free to tell me what features you want to see on MySpace

I'd like to meet people who educate, inspire or entertain me... I have a few

Hello, you either have JavaScript turned off or an old version of Macromedia's Flash

#### **Tom's Friend Space**

Tom has 208119501 friends.

presidential AT&T; dialogues Get MySpace on

Find Madeline NEWS.

Mickey Avalon



Welcome, Guest - [Sign in]

Get a free home page >









Returning GeoCities members, learn how to sign in for the first time.

### Search Home Pages

Search

### **Explore Neighborhoods**

Find home pages in one of our topic-based communities:

Area51 <u>TimesSquare</u> <u>Hollywood</u> SouthBeach Colosseum <u>Tokyo</u> SunsetStrip WestHollywood Heartland

more...

Learn how to bake a Thanksgiving turkey in NapaValley.

#### **Cool Home Page Add-Ons**

#### Animation & Multimedia Instant Info

Animated Logo, Gliding Images... Stock Charter, Counter...

<u>Art</u>

Arrows, Bullets, Buttons, Icons...

Fun & Games

Baseball '99, Game Cheats...

#### Interactive

Forms, Searchbox...

### Pages That Pay

Merchant Center, Join Now!...

#### Five Great Reasons to Get a Free Home Page

- 1. Yahoo! PageBuilder Use your mouse to build a professional-looking page in minutes.
- 2. Home Page Add-Ons Free clip art, headlines, guestbooks and more to enhance your page.
- 3. Neighborhoods Meet people just like you in one of our 11 thorond communities

#### **New and Notable**

#### More space!

Join today and get 15MB of free space. We can't wait to see how you use it.

#### New Landmark Site

Svillafania hails from the Philippine Islands to showcase his exotic way with words in Dalityapi: A Poetry Folio.

#### Shortcut URLs

Use your Yahoo! ID to access your site. Just type: "www.geocities.com/Yahoo!\_ID/" Read our FAQ for more info.

### **Getting Help**

If you need help getting started or have other questions, visit our Help section for frequently asked questions and tutorials.



# 





# Welcome

...to the cemetery of acquired and shutdown websites, platforms and tools

Often taking down with them dead links, lost content and user data

Lanyrd.com

Friends<sup>®</sup> Reunited

### the decentralised web

"A Decentralized Web is a network of resources in which no one player can control the conversation or spin it to [his or her] exclusive advantage."

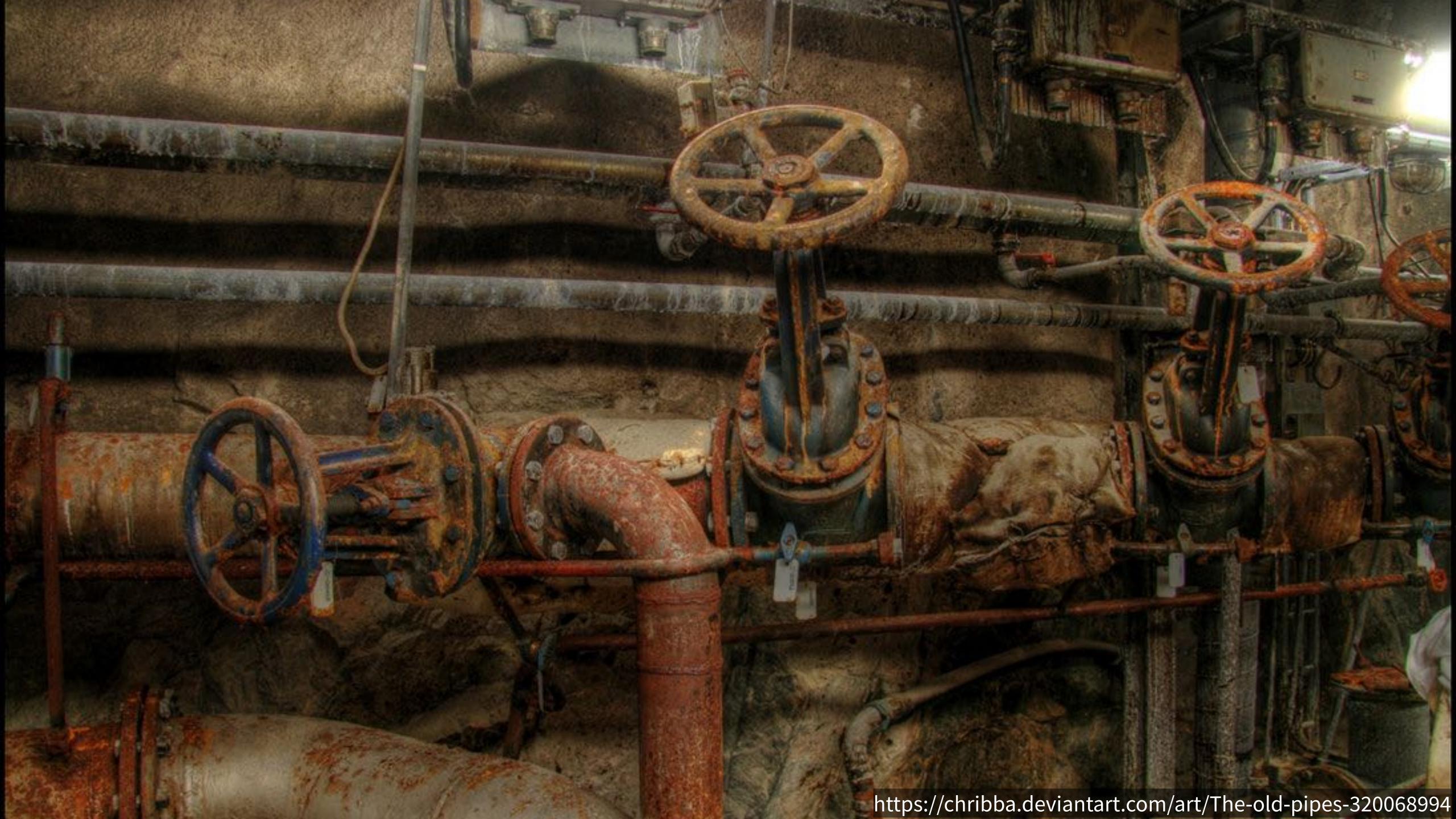
**Simon St. Laurent** 

Strategic Content Director, O'Reilly Media, Inc.

What Is the Decentralized Web? 25 Experts Break it Down

https://ischoolonline.syr.edu/blog/what-is-the-decentralized-web

### ...the decentralised web in decline



#indieweb focused on plumbing-centric design ...rather than user-centric design Calum Ryan @calum\_ryan **London Web Standards / 18 June 2018** 



### Tantek Çelik

The once and future IndieWeb

@ Web Directions South 2013

"When you get complexity, you end up with things that are too hard, too fragile and too few implementations.
...A standard without implementations is not a standard at all."

Video presentation URL

youtu.be/FNr0JNwsLy8

### Enter IndieWeb

2011

Aaaron Parecki Amber Case Crystal Beasley Tantek Çelik

a people-focused alternative to the "corporate web"

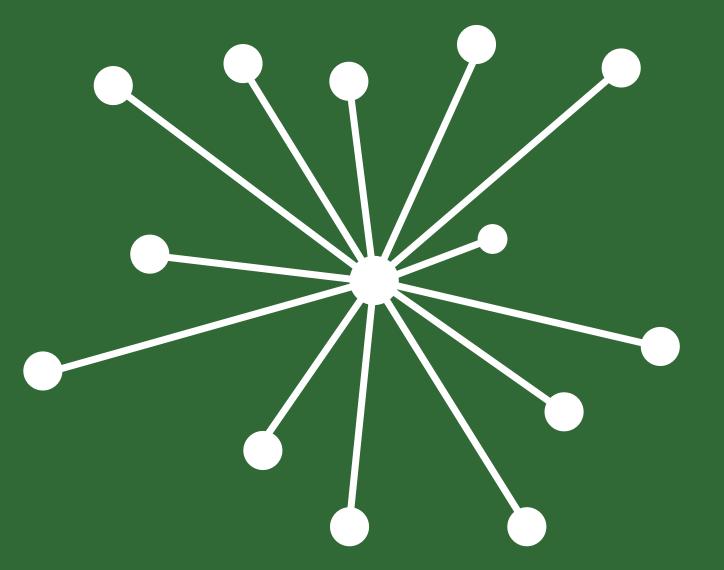
indieweb.org

# Principles

indieweb.org/principles



When you post something on the web, it should belong to you



# You are better connected

Your posts, responses and interactions can go to all services, not just one



### You are in control

Post what you want, in any format you want, share simple readable links



### What/who represents the IndieWeb movement?





### Social

- Freenode IRC discussion
- Wiki Public domain / Creative Commons License
- BarCamp Meeting in-person to stimulate ideas



### Engineering the decentralised web



# Simplify the plumbing and give more time to focus on the **User Experience**



Designing standards focused on users and the front-end



### IndieWeb Standards



microformats.org

```
<article class="h-entry">
 <h1 class="p-name">Microformats are
amazing</h1>
 Published by <a class="p-author h-card"</p>
href="http://example.com">W. Developer</a>
    on <time class="dt-published"
datetime="2013-06-13 12:00:00">13<sup>th</sup>
June 2013</time>
 In which I extoll the
virtues of using microformats.
 <div class="e-content">
   Blah blah blah
 </div>
</article>
```

# **Authentication**

# (1) Use rel="me" attribute indieauth.com

### RelMeAuth

A way to use your own domain name to sign in to websites

Use an existing OAuth provider to log-in to your website

e.g. Github, Twitter

<a rel="me" href="https://twitter.com/calum\_ryan">Me on Twitter</a>

#### Allow ownyourgram.com access to calumryan.com?

The app https://ownyourgram.com would like to access your site, https://calumryan.com/

The app is requesting the following scopes:

create

Authenticate using one of the methods below to approve this request.

3 supported and verified providers were found!

Apr 20 Refresh



hello@calumryan.com

Receive a verification code via email



twitter.com/calum\_ryan

Ok! Click to authenticate using this provider.



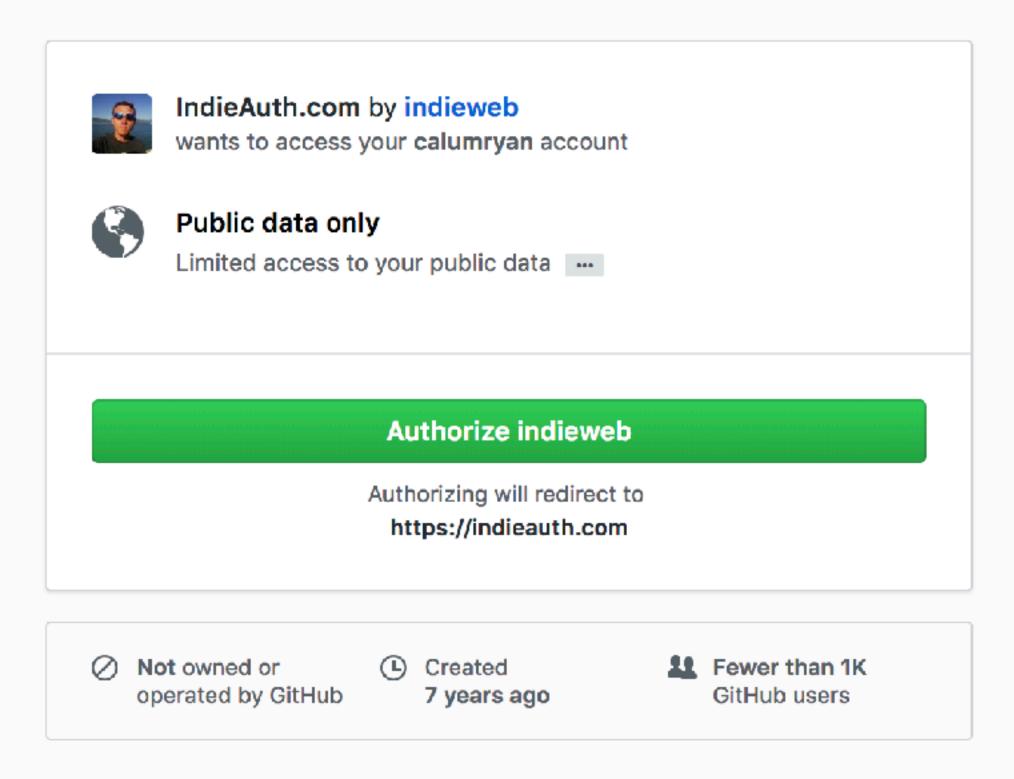
github.com/calumryan

Ok! Click to authenticate using this provider.

You will be redirected to <a href="https://ownyourgram.com/auth/callback">https://ownyourgram.com/auth/callback</a> after authorizing this application.



#### Authorize IndieAuth.com



Learn more about OAuth

### (2) Be your own OAuth provider

Enables you to use your domain name directly as your online identity

Example of a self-hosted Authorisation Endpoint used to login with a personal URL: github.com/inklings-io/selfauth

indieauth.net

### IndieAuth

#### W3C Working Group Note 23 January 2018



#### This version:

https://www.w3.org/TR/2018/NOTE-indieauth-20180123/

#### Latest published version:

https://www.w3.org/TR/indieauth/

#### Latest editor's draft:

https://indieauth.spec.indieweb.org/

#### Test suite:

https://indieauth.rocks/

#### **Editor:**

Aaron Parecki

#### Repository:

Github

Issues

Commits

Please check the errata for any errors or issues reported since publication.

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#### Abstract

IndieAuth is an identity layer on top of OAuth 2.0 [RFC6749], primarily used to obtain an OAuth 2.0 Bearer Token [RFC6750] for use by [Micropub] clients. End-Users and Clients are all represented by URLs. IndieAuth enables Clients to verify the identity of an End-User, as well as to obtain an access token that can be used to access resources under the control of the End-User.

### IndieAuth

W3C Draft w3.org/TR/indieauth

## Micropub W3C Recommendation

w3.org/TR/micropub

### An open API standard.

### Create, update, and delete posts on one's own domain using third-party clients.

Post and edit articles, short notes, comments, likes, photos, events, or other kinds of posts to your own site.

indieweb.org

Quill
Reply
Content
Tags
e.g. web, personal
Slug
Syndicate (refresh list)
Syndicate (renear nat)
No syndication targets were found on your site. You can provide a list of supported syndication targets that will appear as checkboxes here.
Location
Post
Add to Home Scre

Quill.p3k.io

OwnYourGram Docs yourdomain.com Sign In What's This?

#### **#OwnYourGram**

How does it work?

- 1. Sign in with your domain
- 2. Connect your Instagram account
- 3. When you post to Instagram, the photos will be sent to your site!

Get Started »

18607 grams owned by 334 users on their own sites and counting!

#### Top users this week





werd.io/profile/benwerd

12 this week



esham.io

8 this week



### OwnYourGram

ownyourgram.com

#indieweb

### PESOS Publish Elsewhere, Syndicate (to your) Own Site

### POSSE Publish (on your) Own Site, Syndicate Elsewhere

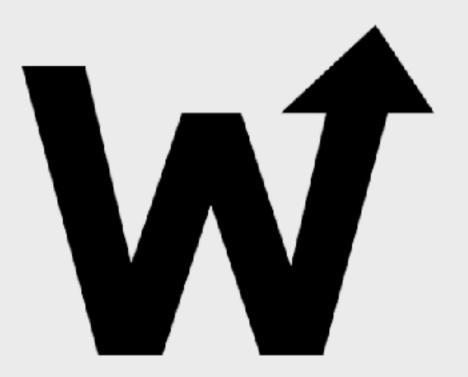


### Webmentions

**W3C Recommendation** 

w3.org/TR/webmention

Notify another URL when you link to it on your site

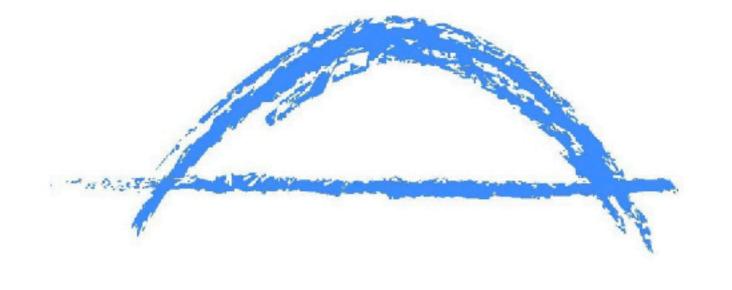


### Webmention.io

Webmention.io is a hosted service created to easily handle webmentions (and legacy pingbacks) on any web page.

You might also be interested in reading about this project on the IndieWeb wiki.

Sign in with your domain



Got a web site?

Want replies and likes from social networks?

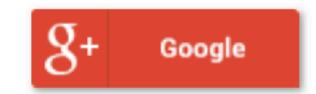
Want to tweet, post, and more?

Bridgy is for you. Learn more...

### Connect your accounts:













### Using one of these? Click to add webmentions:









Already signed up? Find your user page here.

4,807 accounts, 11,129,884 responses handled, 2,713,606 links analyzed, 1,095,357 webmentions sent, 31,583 posts published, 41,098 blog posts processed, and counting...



### \*Brid.gy & Facebook

**Turning off Facebook for Bridgy** 

snarfed.org/2018-06-07\_turning-off-facebook-for-bridgy



y

As predicted, Facebook uses their privacy debacles as an excuse to lock out genuine data portability apps.

snarfed.org/2018-06-07\_tur... #Indieweb 9:05 PM - Jun 7, 2018

Calum Ryan *@calum\_ryan* 



### Get your site on the IndieWeb

indieweb.org/projects

- **▶** Known
- ▶ WordPress
- ▶ Jekyll
- Perch



#### 1. Get your own domain name

#indieweb

A personal **domain name** is an inexpensive, internationally universal identifier which gives you more control over your space than other IDs (e.g. email address or phone number.)

On the wiki: Personal Domains.

#### 2. Set up Web Sign In

In order to be able to sign in using your domain name, connect it to your existing identities

You probably already have many disconnected profiles on the web. Linking between them and your domain name with the rel=me microformat ensures that it's easy to see that you on Google/Twitter/Github/Flickr/Facebook/email are all the same person as your domain name.

On the wiki: How to set up Web Sit Indie Web if y. me

http://yoursite.com

Test

Want to be able to use rel-me data in your code? Check out the open source implementations.

### Publishing on the IndieWeb Level 2

#### 1. Mark up your content (Profile, Notes, Articles, etc...) with microformats2

Other humans can already understand your profile information, and the things you post on your site. By adding a few simple classnames to your HTML, other people's software can understand it all too, and use it for things like <u>reply</u> <u>contexts</u>, <u>cross-site comments</u>, <u>event RSVPs</u> and more.

Calum Ryan @calum\_ryan

**London Web Standards /** 18 June 2018



# Help make the decentralised web a better place for everyone

- Be an active part of the community
- Build a better experience than the silos
- Contribute in-person
- Help solve problems that people actually need solving



# Attend an IndieWebCamp indieweb.org/next-iwc

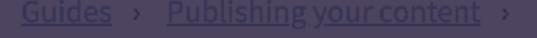


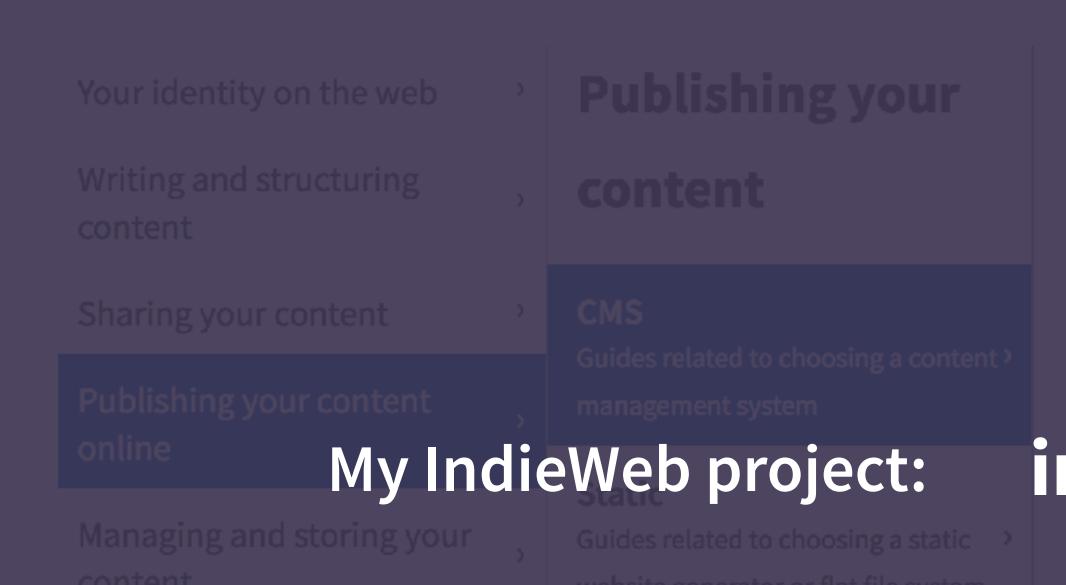


### Join discussion on Slack/IRC

Freenode #indieweb chat.indieweb.org/slack









#indieweb Homebrew Website Club London hwclondon.co.uk Calum Ryan @calum\_ryan **London Web Standards /** 18 June 2018



More on re-decentralisation... redecentralize.org/about

A collection of interesting networks and technology aiming at re-decentralising the Internet: <a href="https://github.com/redecentralize/alternative-internet">https://github.com/redecentralize/alternative-internet</a>

# Learn more and contribute indieweb.org



### thank you

calumryan.com / @calum\_ryan