WHAT, WHY AND HOW TO JAMSTACK

PHIL HAWKSWORTH

STACKS FOR DAYZ

AN / LAMP / MAMP / XAMP / ROR / WISA / MEA

WISA / MEAN / LAMP / MAMP / XAMP / ROR /

jamstack

JAVASCRIPT / API / MARKUP

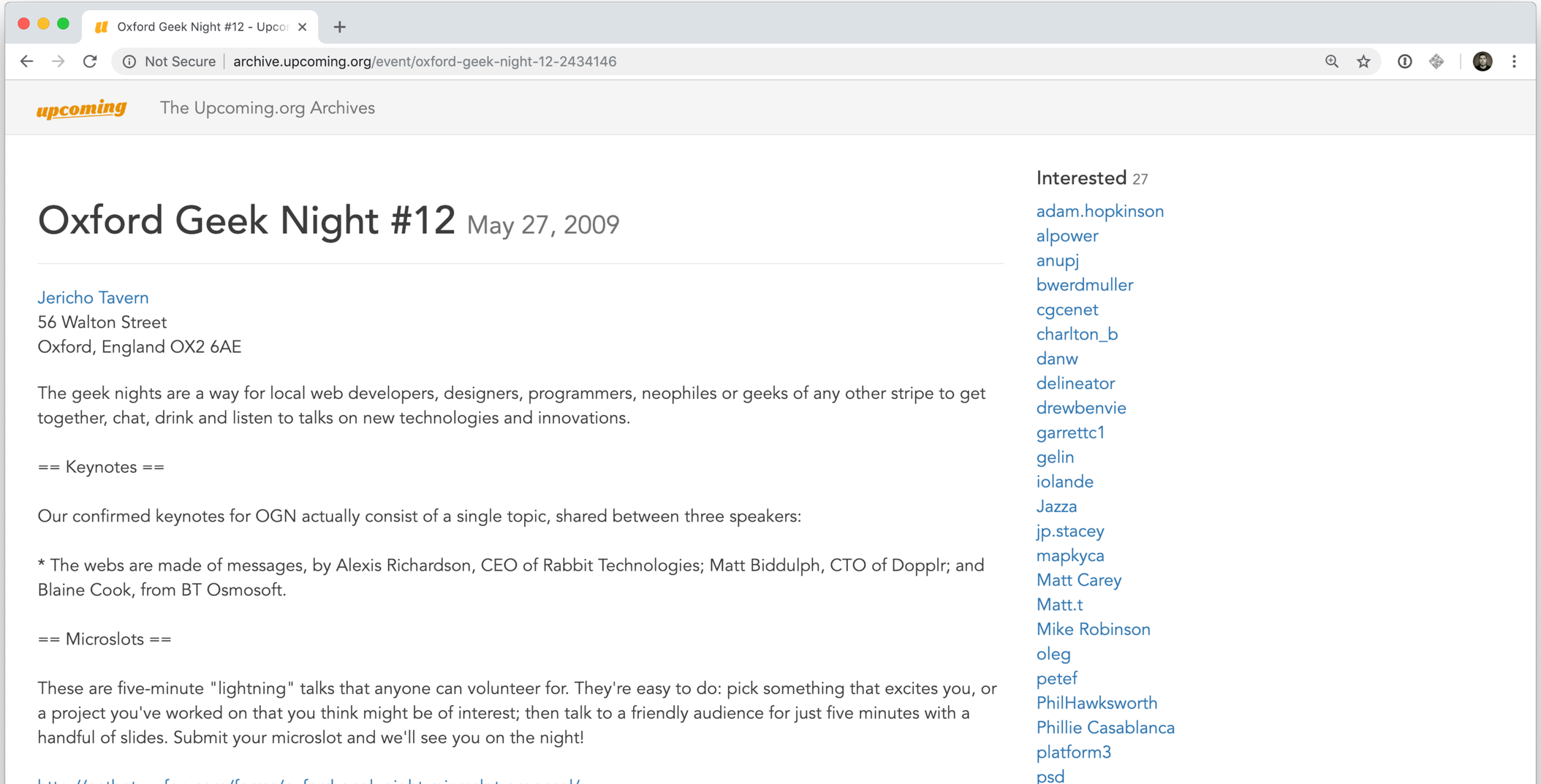
@PHILHAWKSWORTH

HEAD OF DEVELOPER RELATIONS, NETLIFY

TEN YEARS

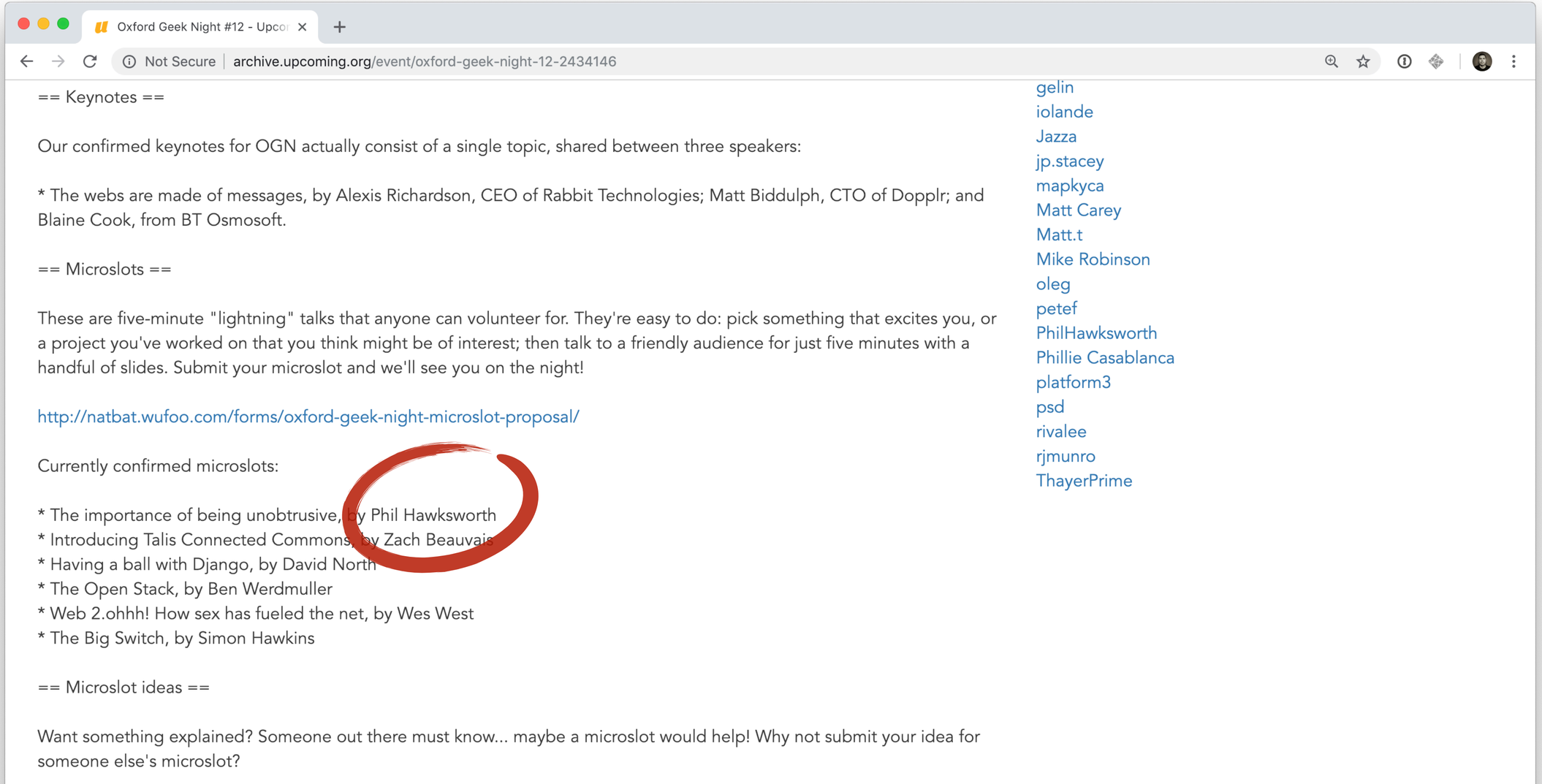
FINDTHAT.AT/THEPAST

http://archive.upcoming.org/event/oxford-geek-night-12-2434146



FINDTHAT.AT/THEPAST

http://archive.upcoming.org/event/oxford-geek-night-12-2434146



netlify

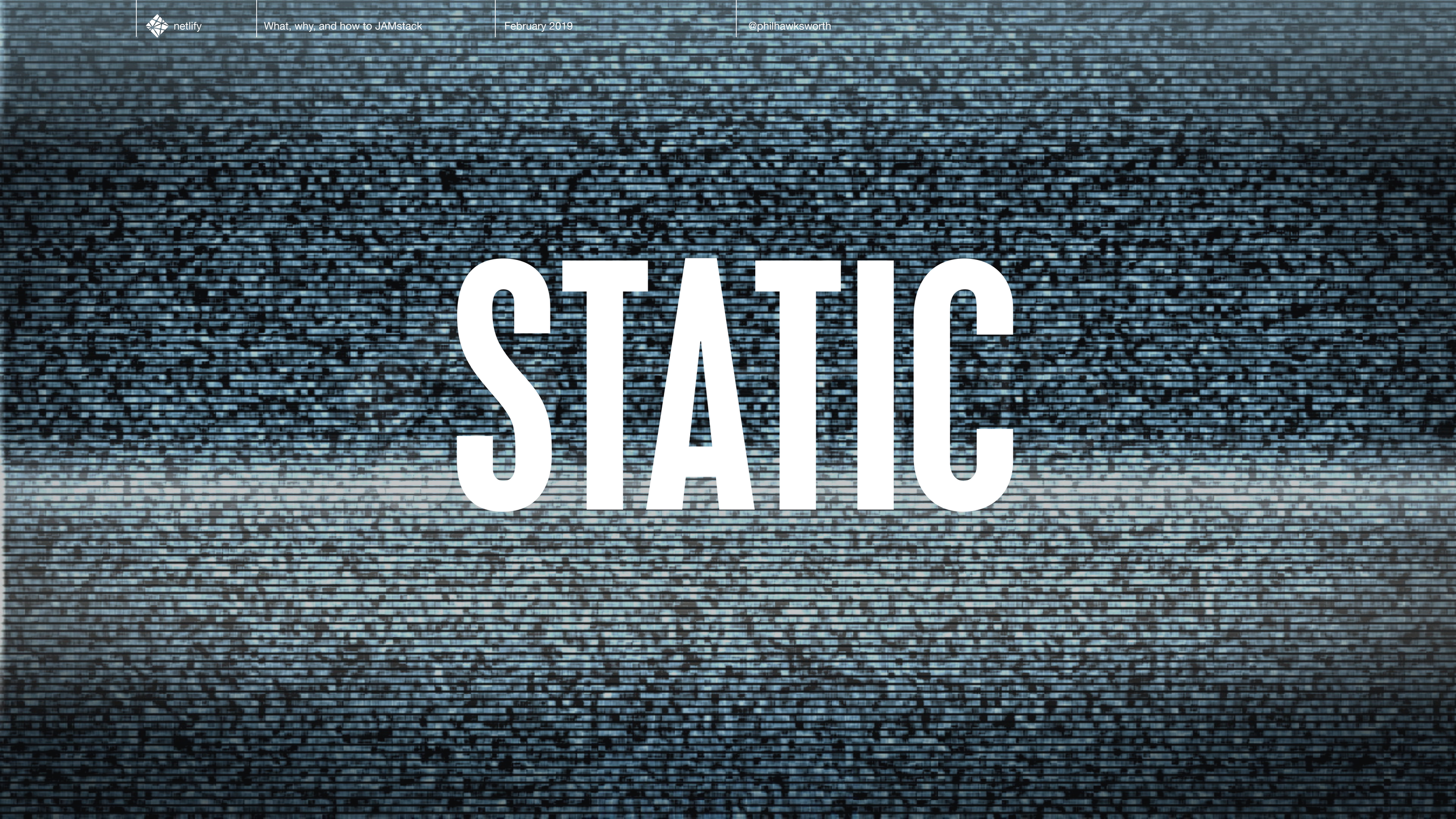
STATIC / PRE-RENDERED / JAMSTACK

WHAT, WHY AND HOW TO JAMSTACK

PHIL HAWKSWORTH

STATIC

STATIC


STATIC

STATIC

/ˈstatɪk/

lacking in movement, action, or change, especially in an undesirable or uninteresting way.

STATIC

/ˈstatɪk/

lacking in movement, action, or change, especially in an undesirable or uninteresting way.

STATIC

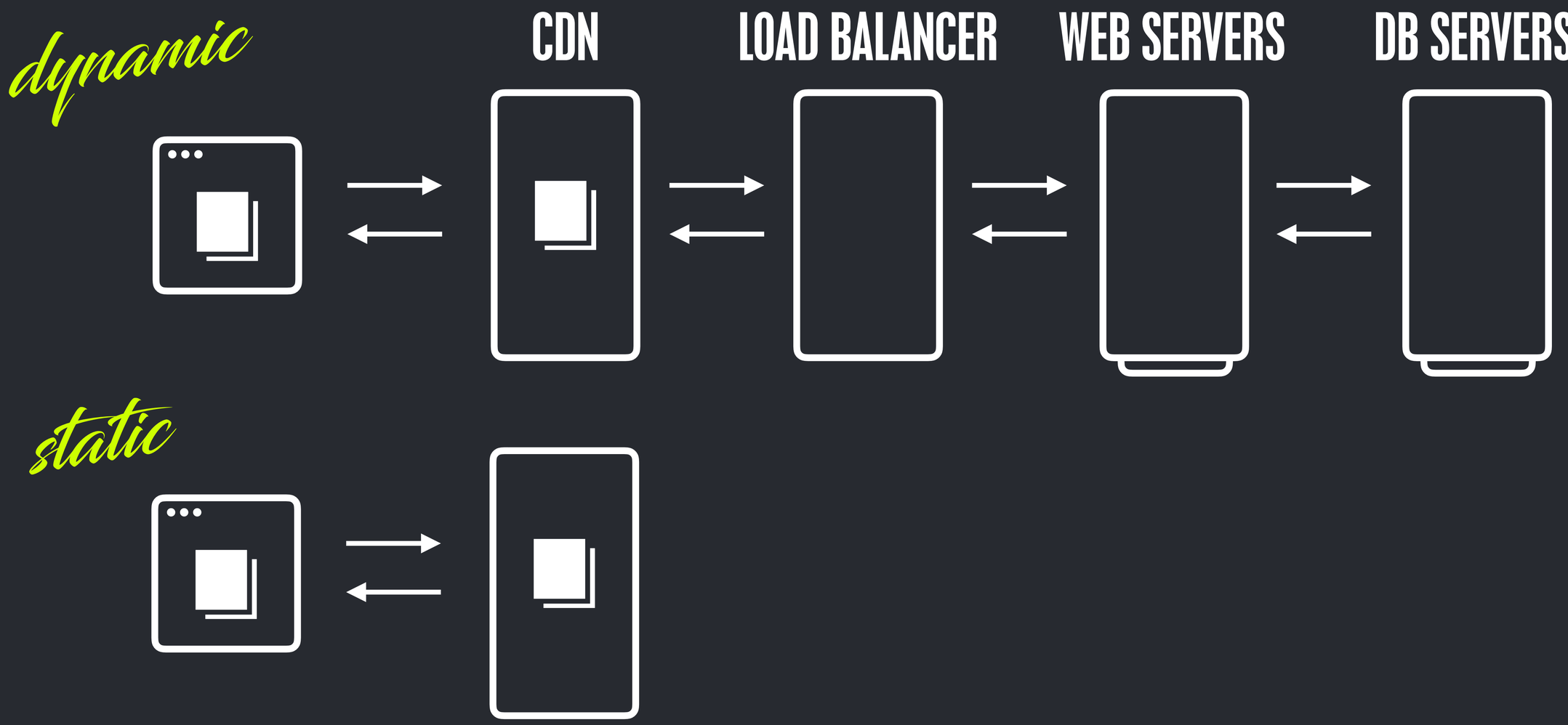
ARCHITECTURE?

or

EXPERIENCE?

STATIC *as a* VIRTUE

STATIC *vs* DYNAMIC


dynamic
CDN
LOAD BALANCER
WEB SERVERS
DB SERVERS
static

STATIC *means*

CAPABLE OF BEING SERVED DIRECTLY FROM A CDN

STATIC *means*

NO WORK TO BE DONE AT REQUEST TIME

jamstack
DON'T GET HUNG UP
ON THE JAM

jamstack
DON'T GET STUCK
ON THE JAM

JAMSTACK *means*

CAPABLE OF BEING SERVED DIRECTLY FROM A CDN

CAPABLE OF BEING ENHANCED WITH JAVASCRIPT AND APIS

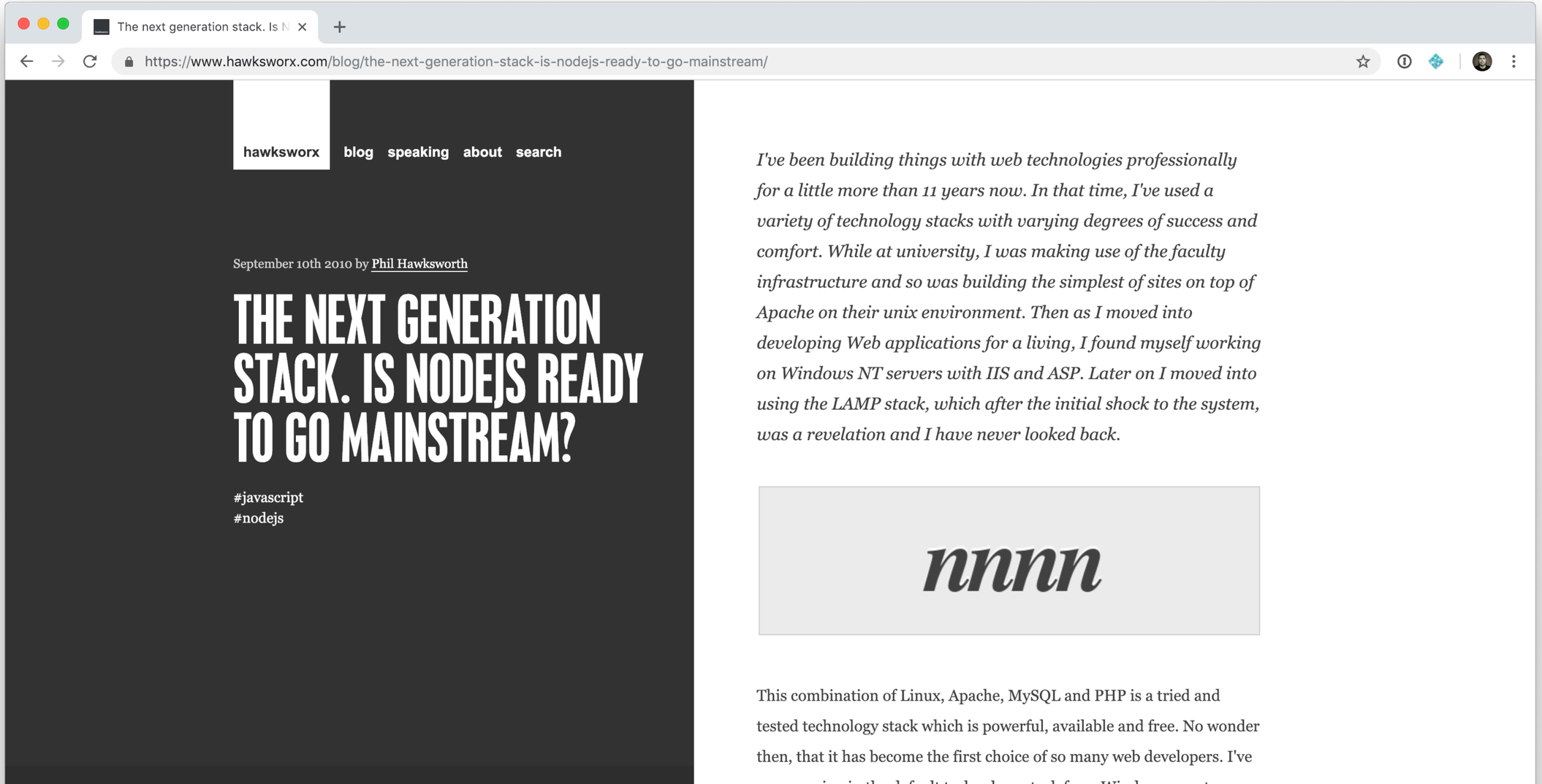
shhhhh!

I SOMETIMES BUILT LAMP STACK SITES ON A MAC, AND I DIDN'T ALWAYS USE MYSQL

MAP STACK

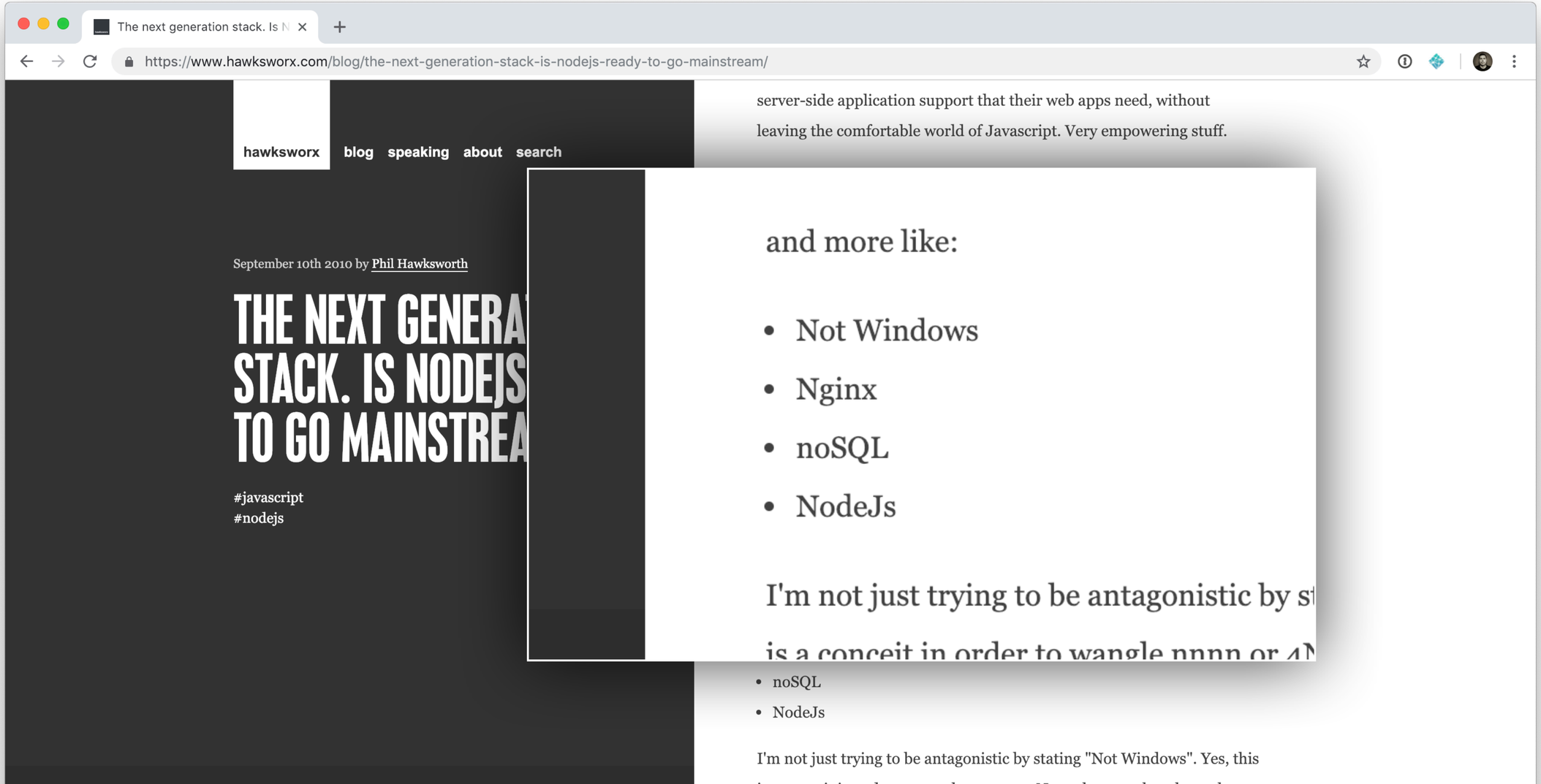
FINDTHAT.AT/NNNN

https://www.hawksworx.com/blog/the-next-generation-stack-is-nodejs-ready-to-go-mainstream/



FINDTHAT.AT/NNNN

https://www.hawksworx.com/blog/the-next-generation-stack-is-nodejs-ready-to-go-mainstream/



WELL ACTUALLY... THIS JAMSTACK STUFF IS NOTHING NEW

THAT VOICE ON THE INTERNET

BAKE, DON'T FRY

– Aaron Swartz

I CARE ABOUT NOT HAVING TO MAINTAIN CRANKY AOLSERVER, POSTGRES AND ORACLE INSTALLS

AARON SWARTZ

jamstack enablers

WHAT, WHY AND HOW TO JAMSTACK

PHIL HAWKSWORTH

netlify

BROWSERS

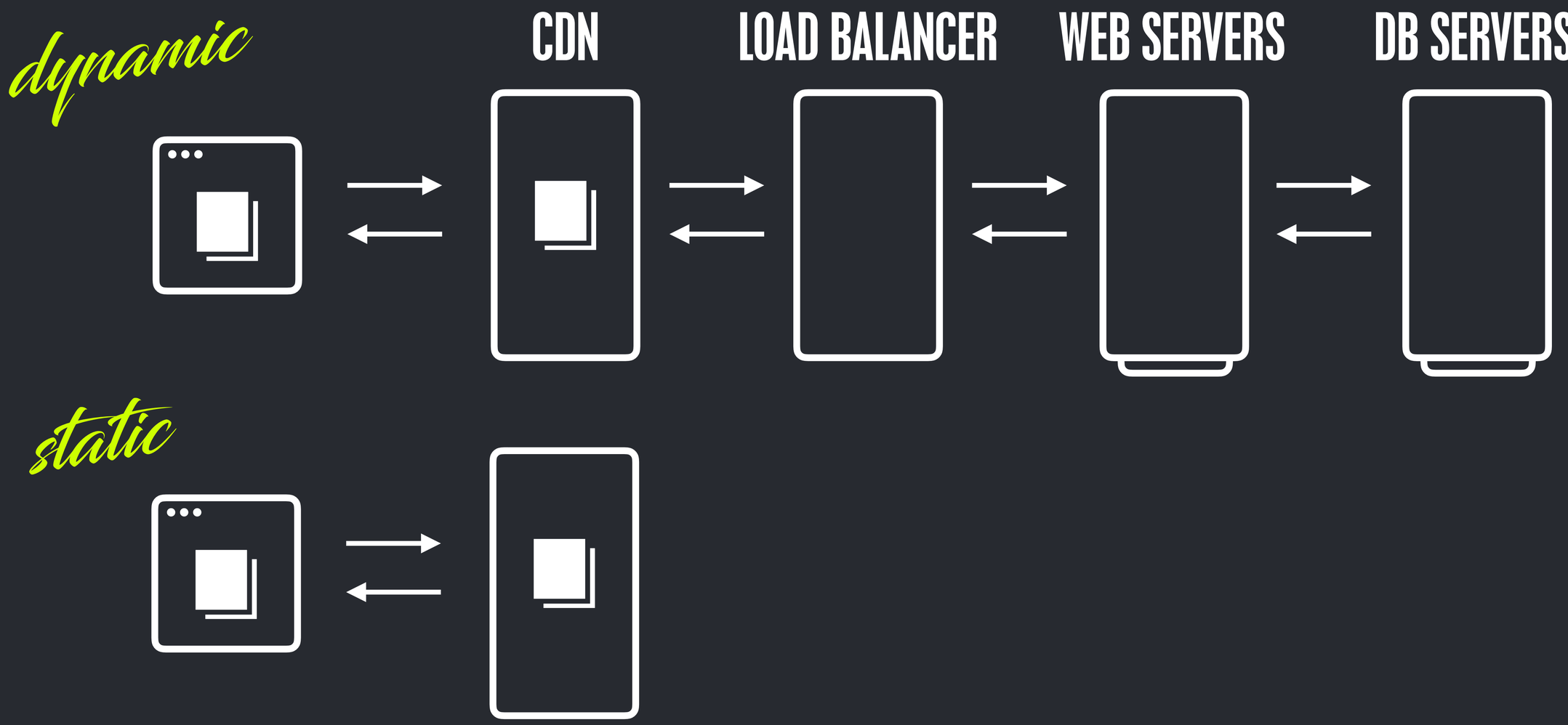
EVERGREEN / RICH APIS / OFFLINE / PERFORMANCE / STANDARDISATION

ECOSYSTEM

GENERATORS / CONTENT / ASSETS / AUTHENTICATION / E-COMMERCE / SEARCH

INFRASTRUCTURE

TOOLING / CDN / CI/CD / AUTOMATION / TRIGGERS / EVENTS

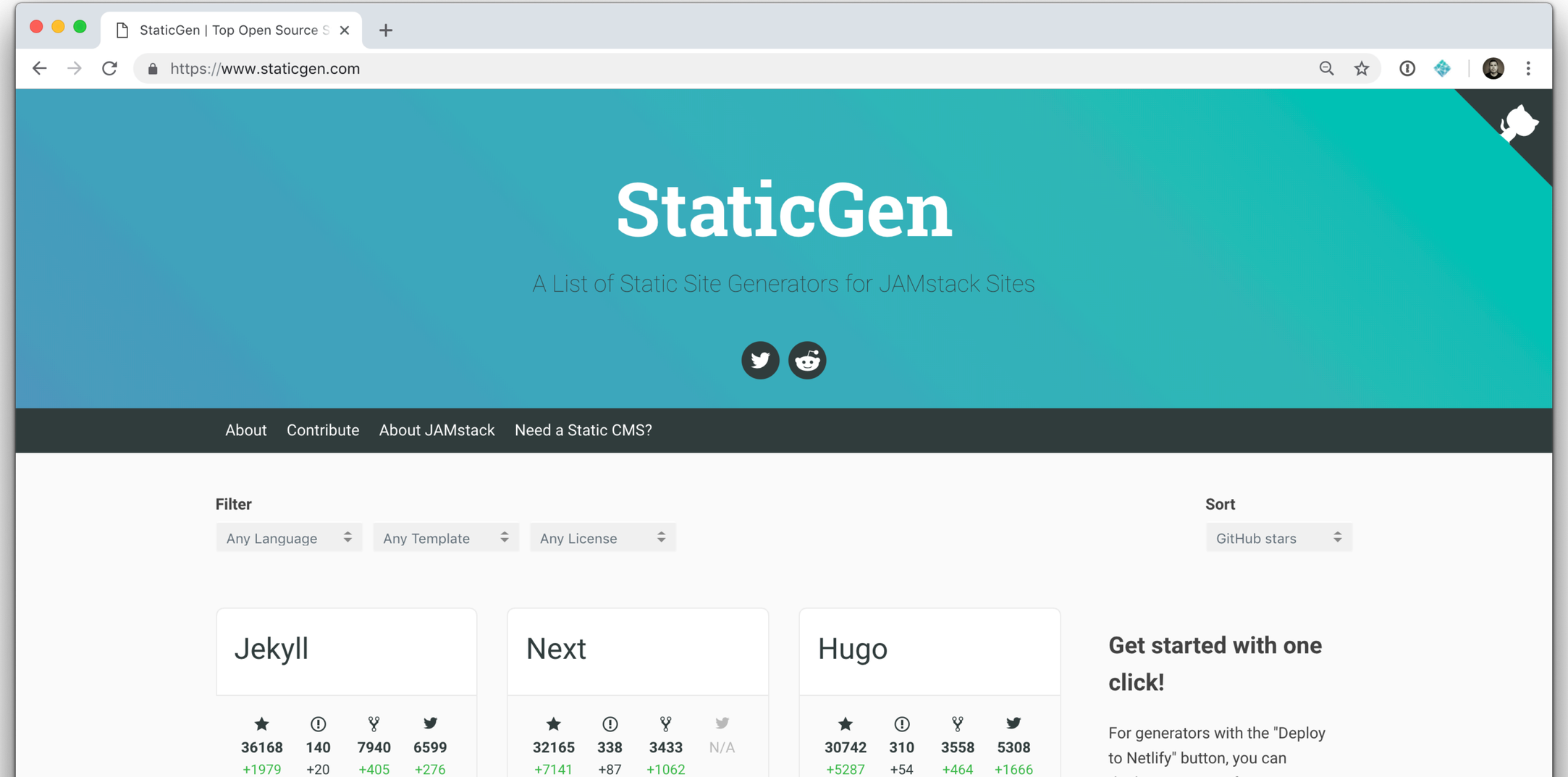

dynamic
CDN
LOAD BALANCER
WEB SERVERS
DB SERVERS
static

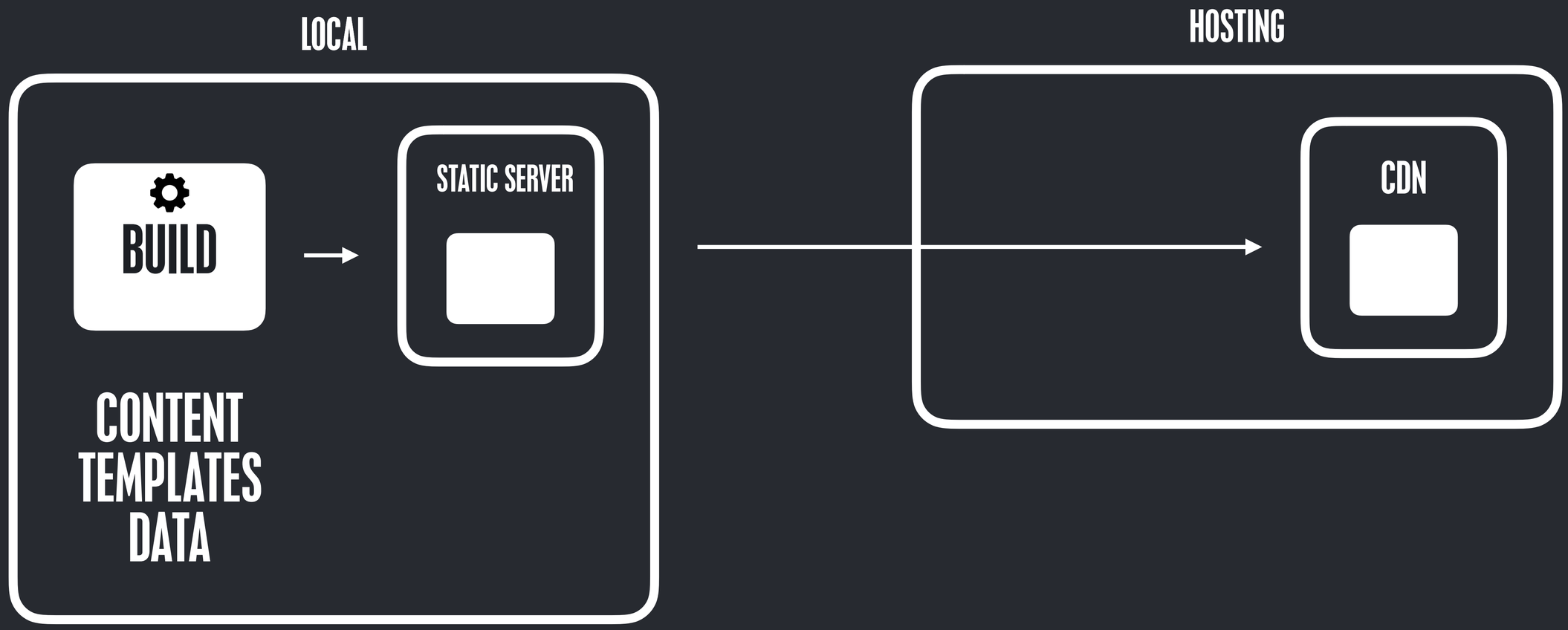
LAUNCH DAY

GET
TO
THE
CHOPPER
CDN

FINDTHAT.AT/SSGS

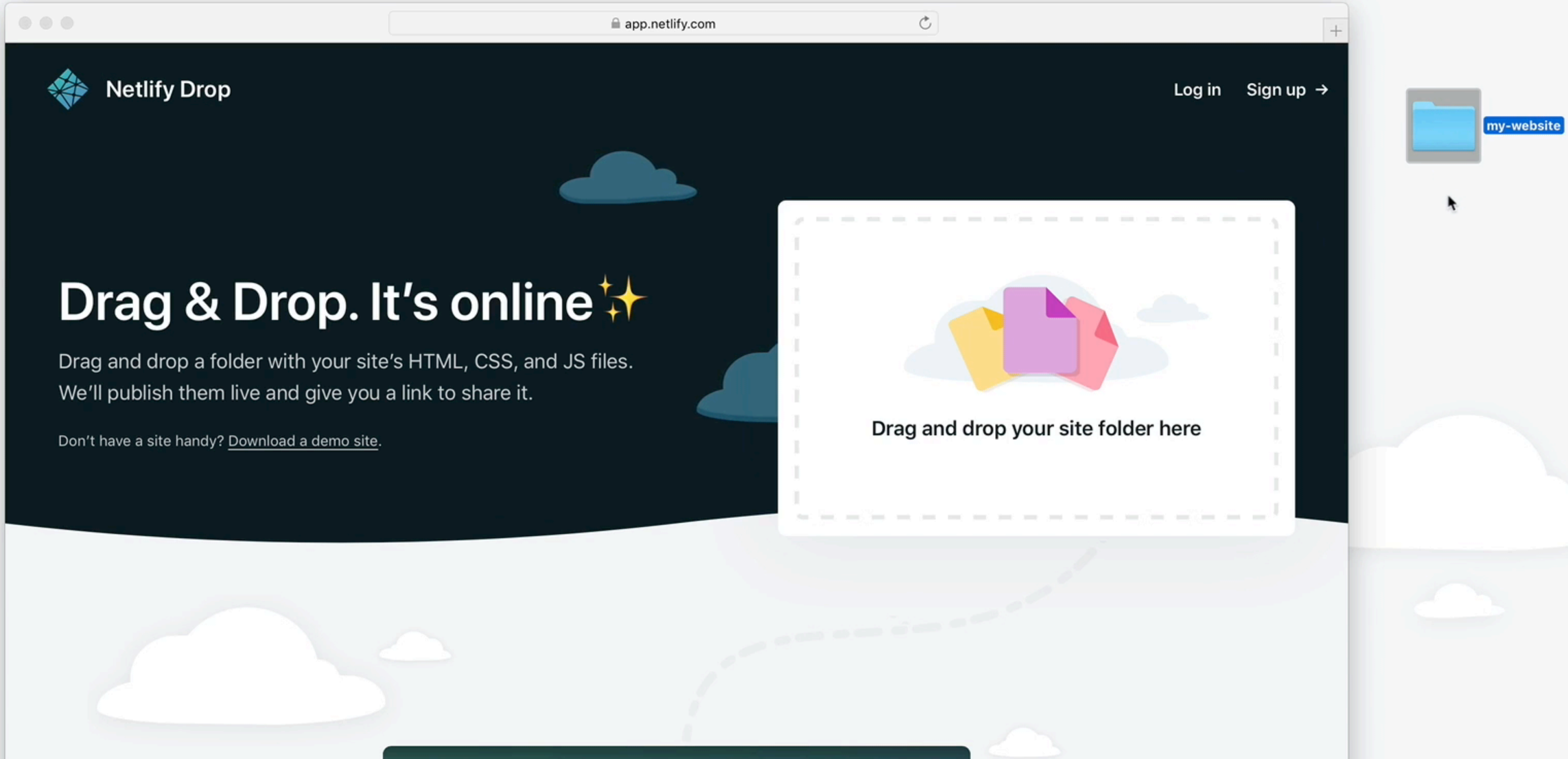
https://www.staticgen.com/




LOCAL
BUILD
STATIC SERVER
CONTENT
TEMPLATES
DATA
HOSTING
CDN

FINDTHAT.AT/DROP

https://app.netlify.com/drop



netlify

△

aws

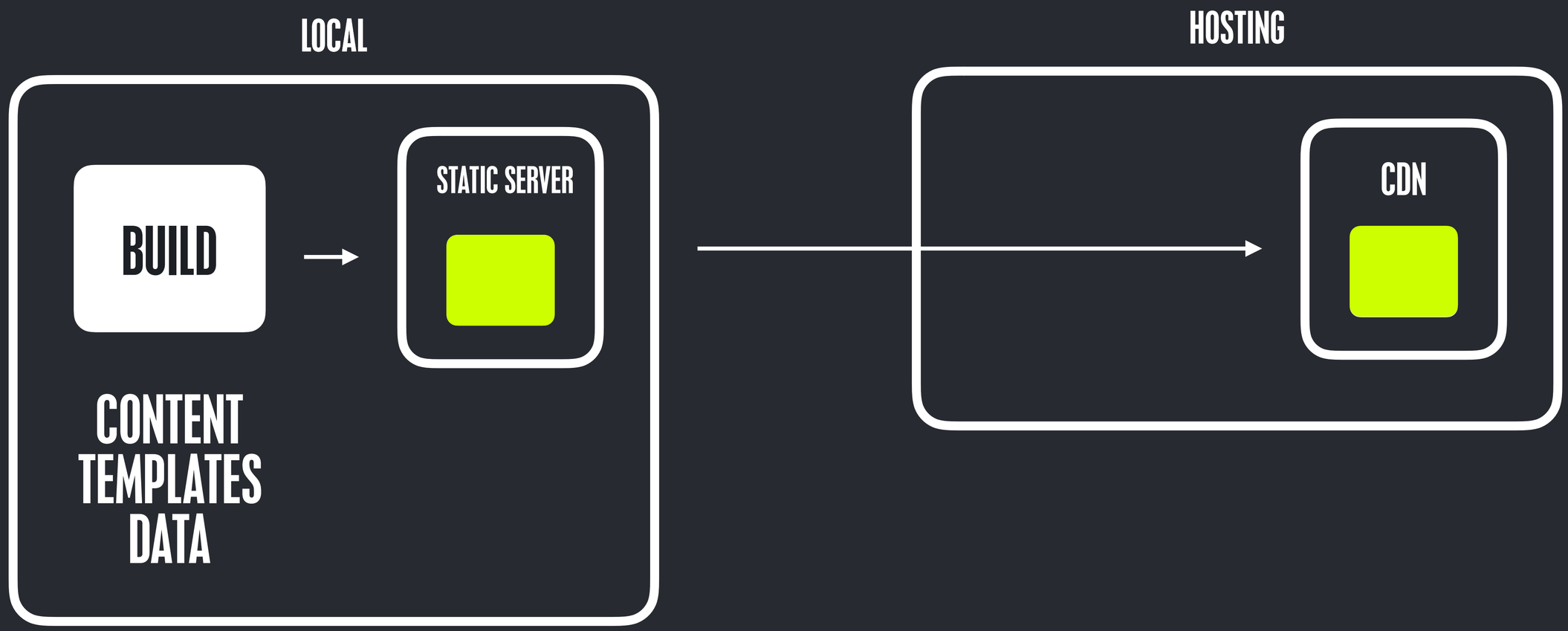
Azure

AUTOMATION

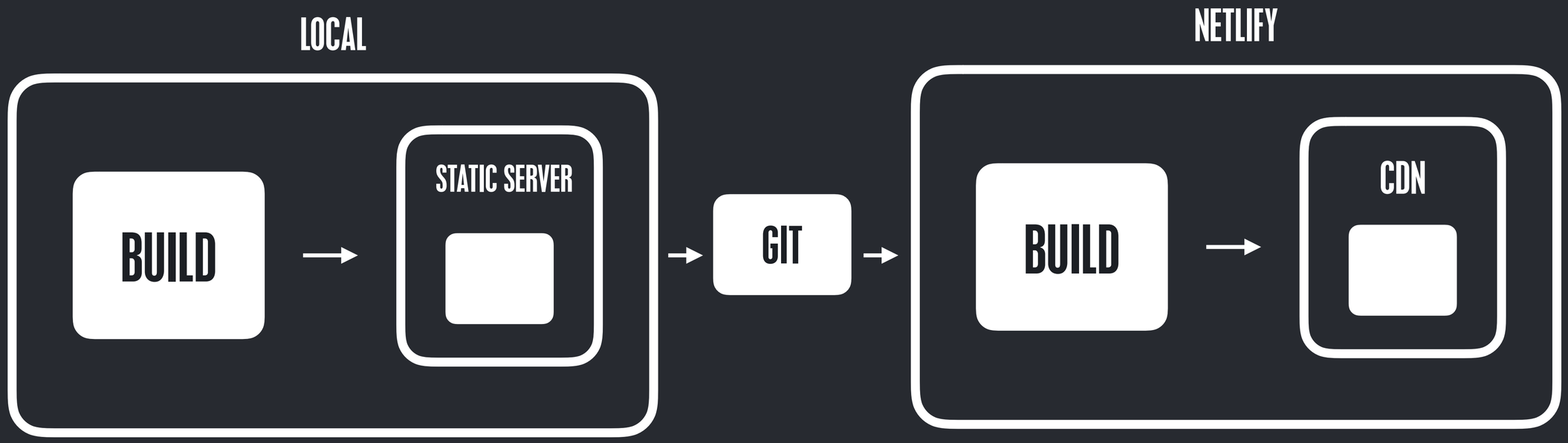
REPEATABILITY / PREDICTABILITY / ACCOUNTABILITY / AGILITY

REPLICATION

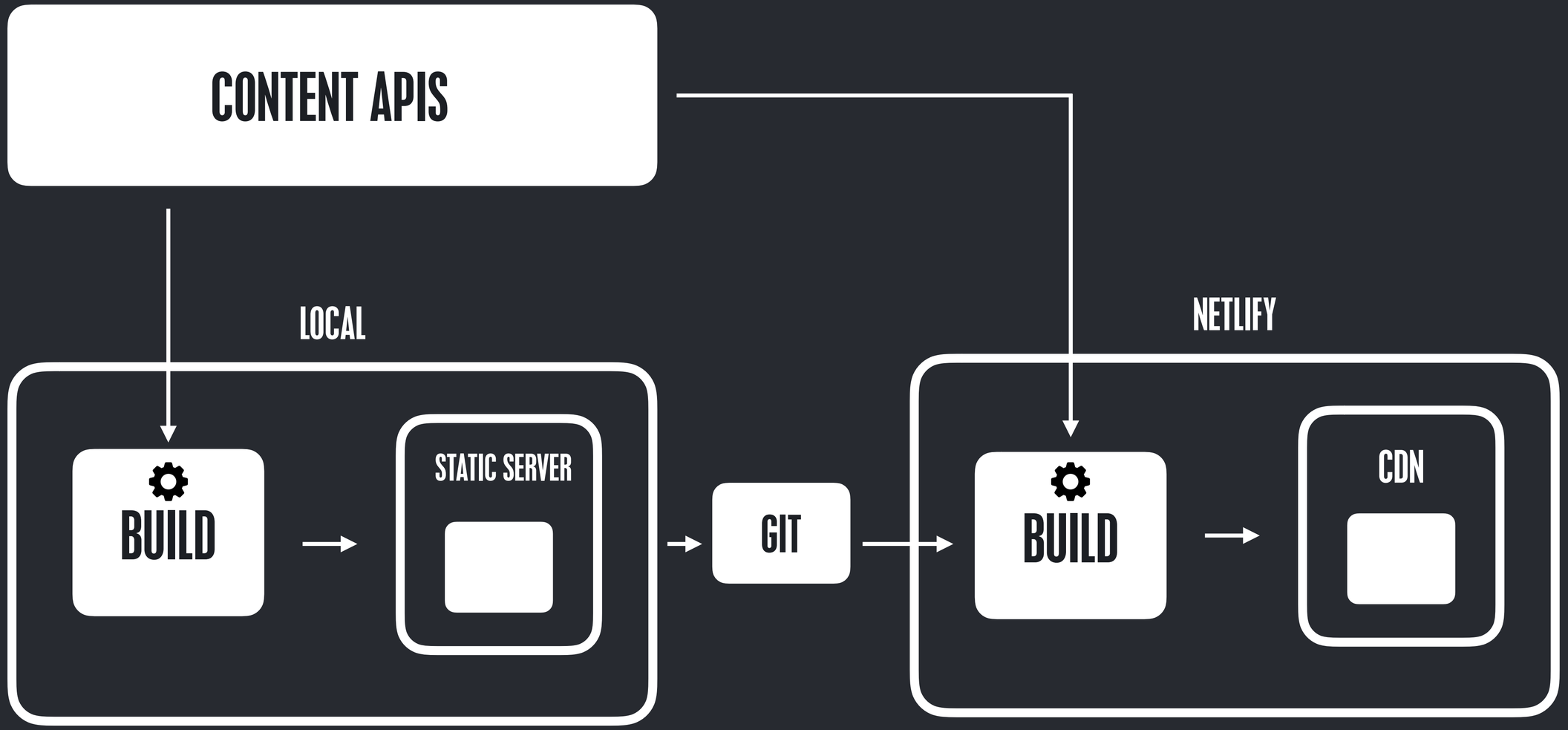
REPEATABILITY / PREDICTABILITY / COMNFIDENCE / VERSION CONTROL


LOCAL
BUILD
STATIC SERVER
CONTENT
TEMPLATES
DATA
HOSTING
CDN

GIT-BASED DEPLOYMENTS


LOCAL
BUILD
STATIC SERVER
GIT
NETLIFY
BUILD
CDN

DATA SOURCES


CONTENT APIS
LOCAL
BUILD
STATIC SERVER
GIT
NETLIFY
BUILD
CDN

PROVE IT, PHIL

enabled by

AUTOMATION AND REPLICATION

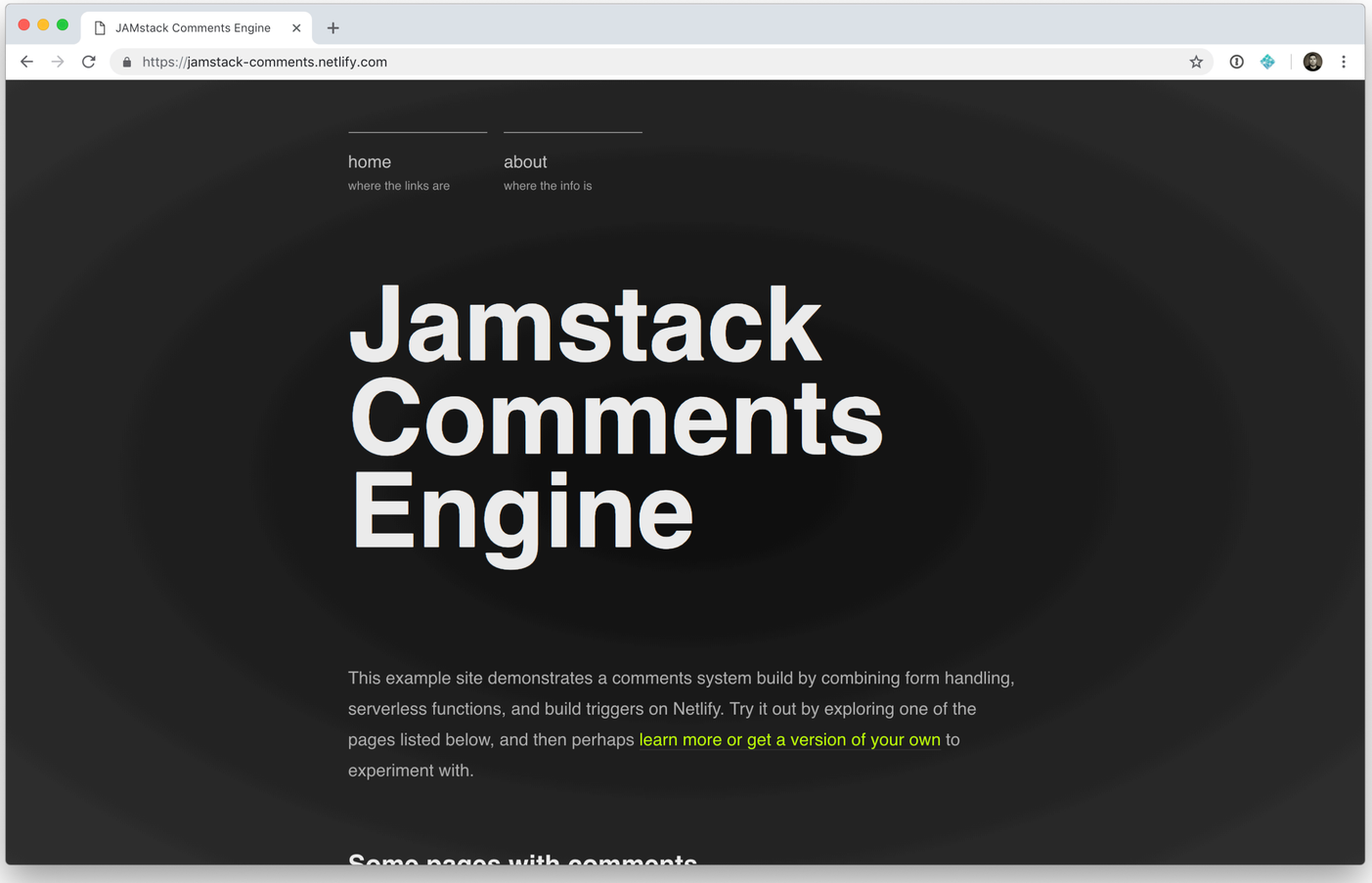
PROVE IT, PHIL

enabled by

HAVING A KNOWABLE STATE

FINDTHAT.AT/COMMENTS

https://jamstack-comments.netlify.com



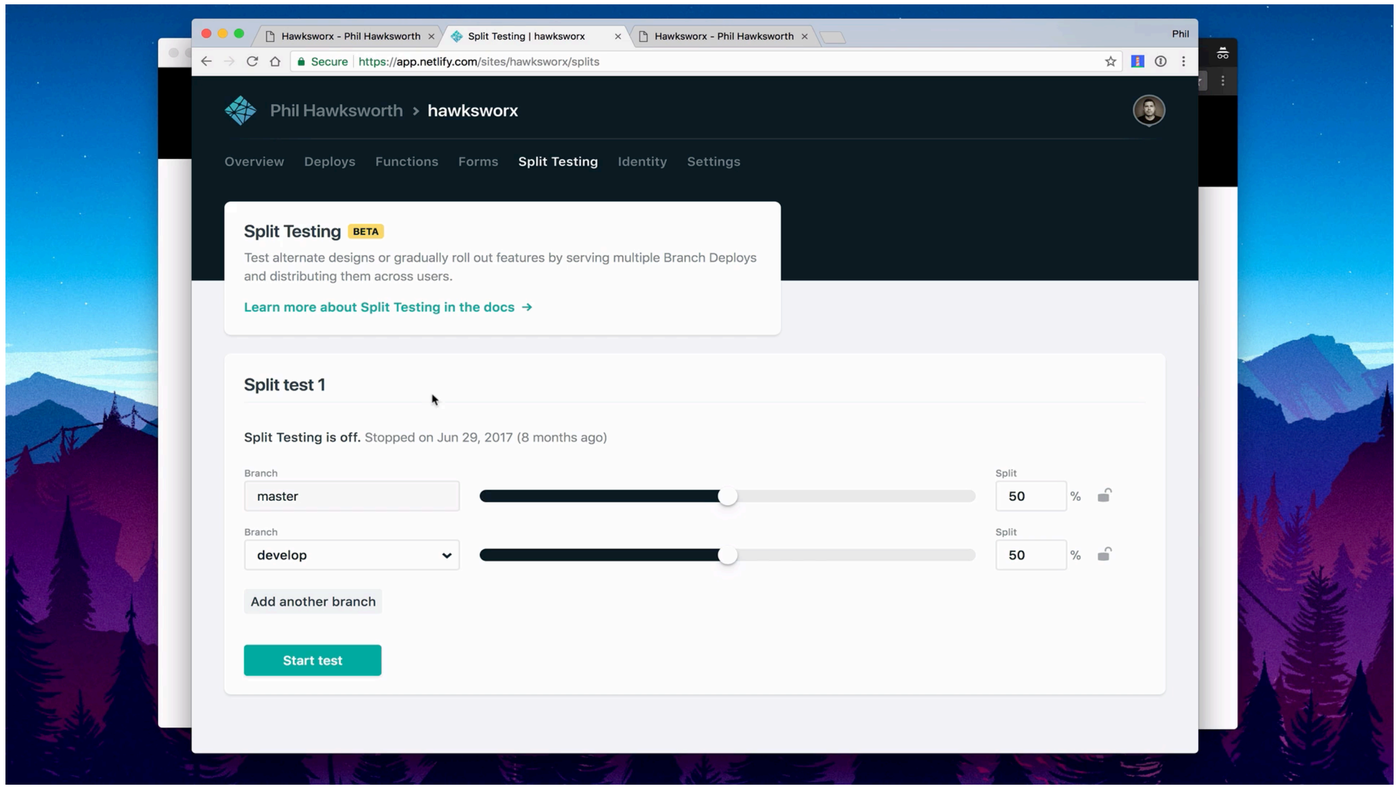
ZERO JAVASCRIPT DEPENDENCIES

COMMENTS AS PAGE CONTENT

NOTIFICATIONS AND MODERATION VIA SLACK

FINDTHAT.AT/AB

https://www.youtube.com/watch?v=5VgpJJUOng4



ZERO JAVASCRIPT DEPENDENCIES

VARIANTS ALL DEPLOYED AS PRODUCTION

ZERO PERFORMANCE OVERHEADS

VERY LOW FRICTION

Zach Leatherman
@zachleat

Following

free side project idea: HTML-only static site generated clock that deploys a new version to @netlify every minute

8:54 PM - 19 Jul 2018

30 Likes

3 30

Chris Coyier

@chriscoyier

Following

Replying to @zachleat @hankchizljaw @Netlify

Would be clever marketing for Netlify for sure. _Builds so cheap you can set your clock by them._

(I'm still workshopping it.)

9:12 PM - 19 Jul 2018

7 Likes

Phil Hawksworth

@philhawksworth

Replying to @zachleat @chriscoyier and 2 others

Hold my beer.

10:25 PM - 19 Jul 2018

12 Likes

2 12

Phil Hawksworth

@philhawksworth

Replying to @philhawksworth @zachleat and 3 others

Only an idiot would make what you are suggesting.

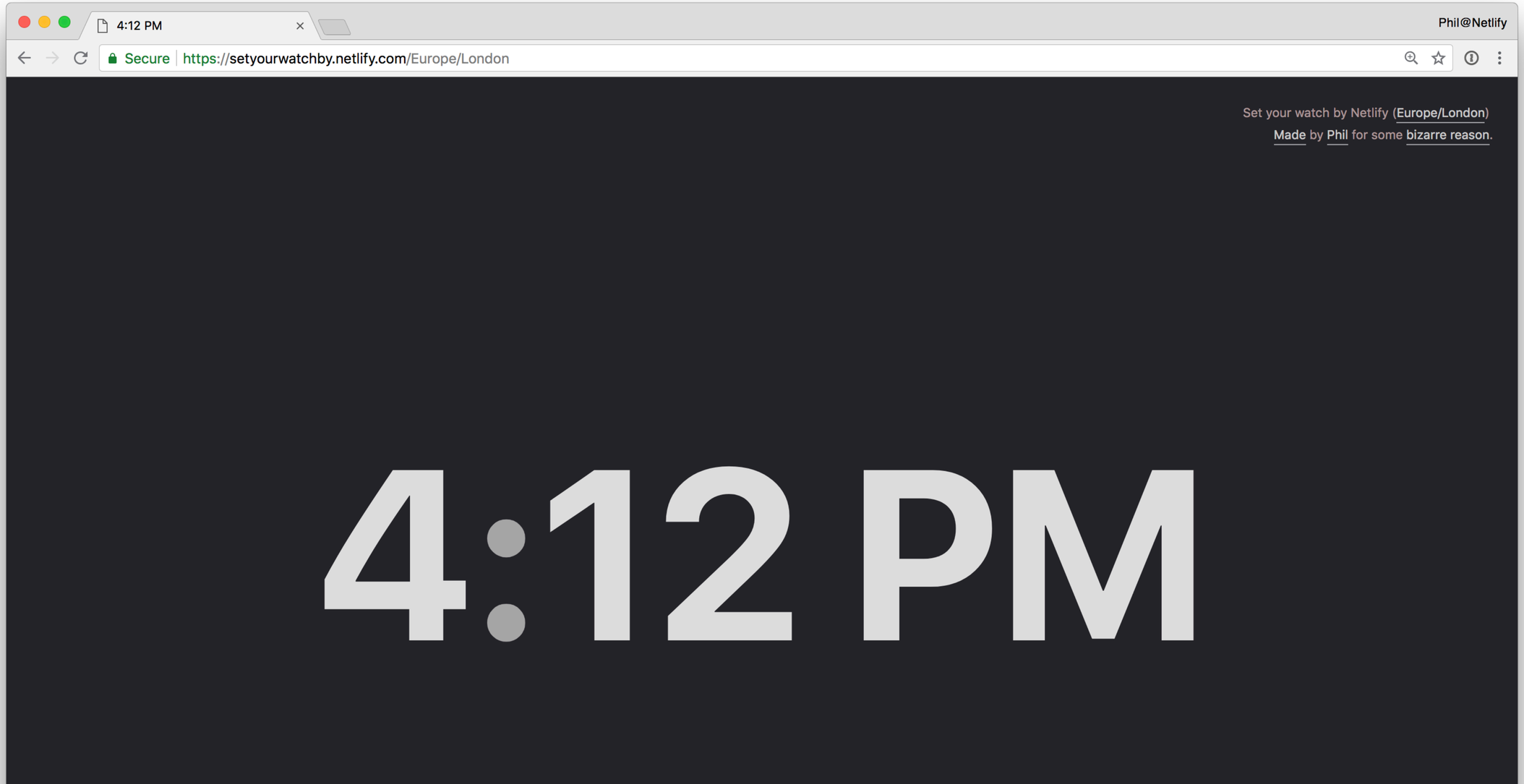
setyourwatchby.netlify.com

2:02 PM - 20 Jul 2018

12 Retweets **41** Likes

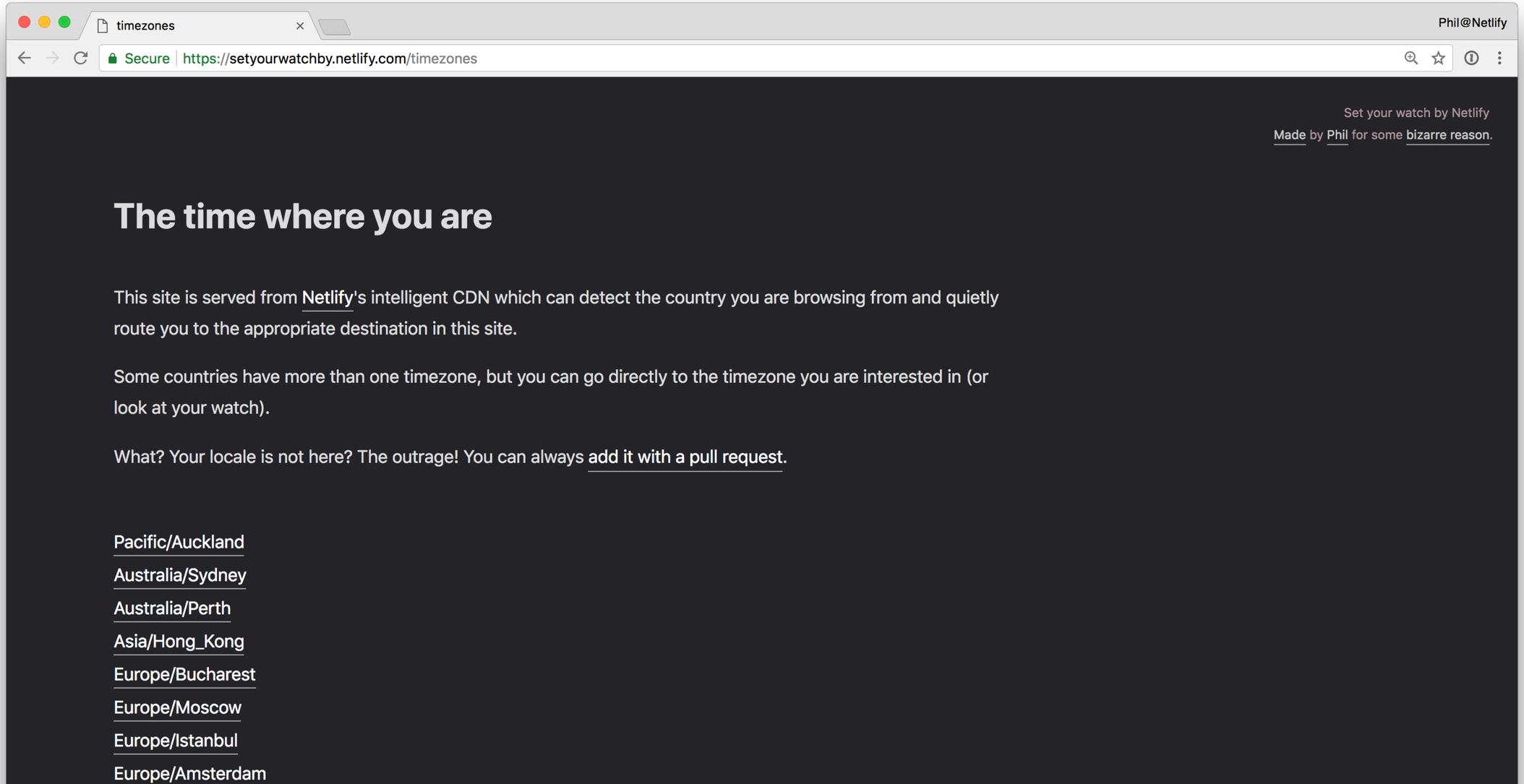
FINDTHAT.AT/TIME

https://setyourwatchby.netlify.com



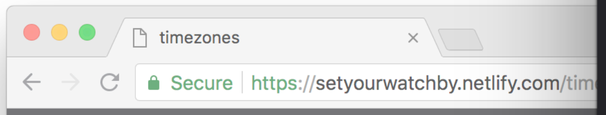
FINDTHAT.AT/TIME

https://setyourwatchby.netlify.com



FINDTHAT.AT/TI

https://setyourwatchby.netlify.



The time where you

This site is served from Netlify's intellige
route you to the appropriate destination

Some countries have more than one time
look at your watch).

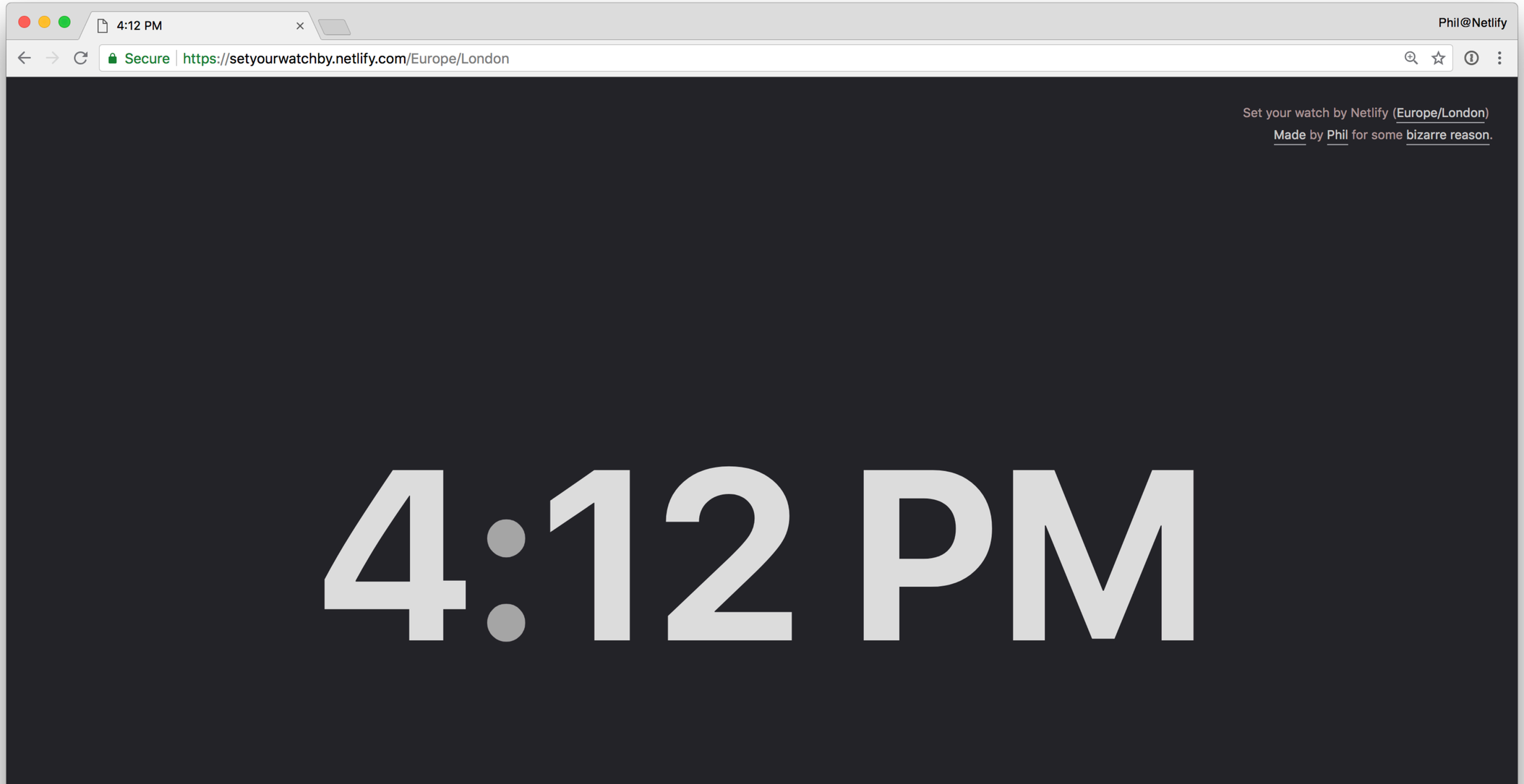
What? Your locale is not here? The outra

Pacific/Auckland
Australia/Sydney
Australia/Perth
Asia/Hong_Kong
Europe/Bucharest
Europe/Moscow
Europe/Istanbul
Europe/Amsterdam

Pacific/Auckland
Australia/Sydney
Australia/Perth
Asia/Hong_Kong
Europe/Bucharest
Europe/Moscow
Europe/Istanbul
Europe/Amsterdam
Europe/Paris
Europe/London
America/New_York
America/Chicago
America/Denver
America/Los_Angeles

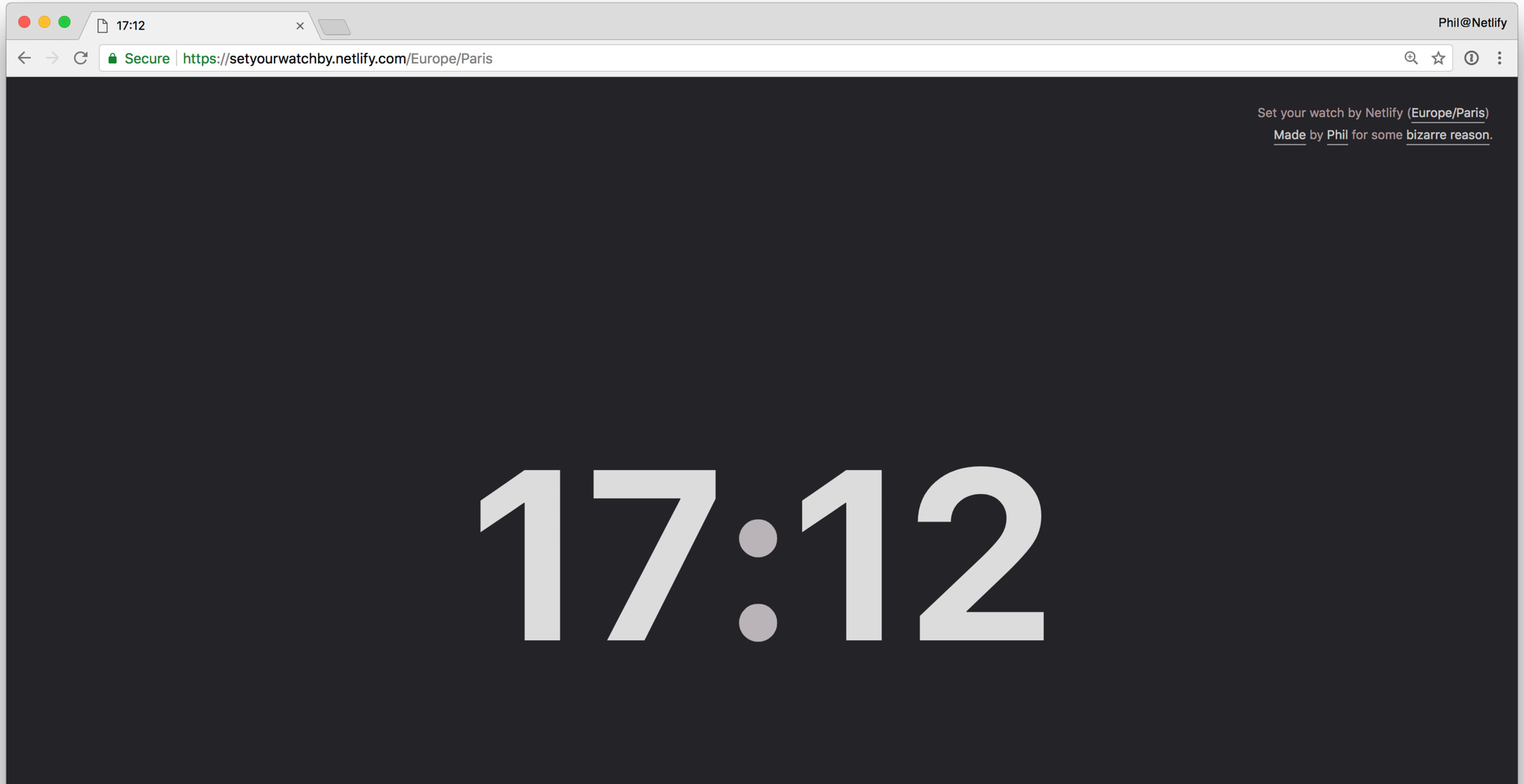
FINDTHAT.AT/TIME

https://setyourwatchby.netlify.com

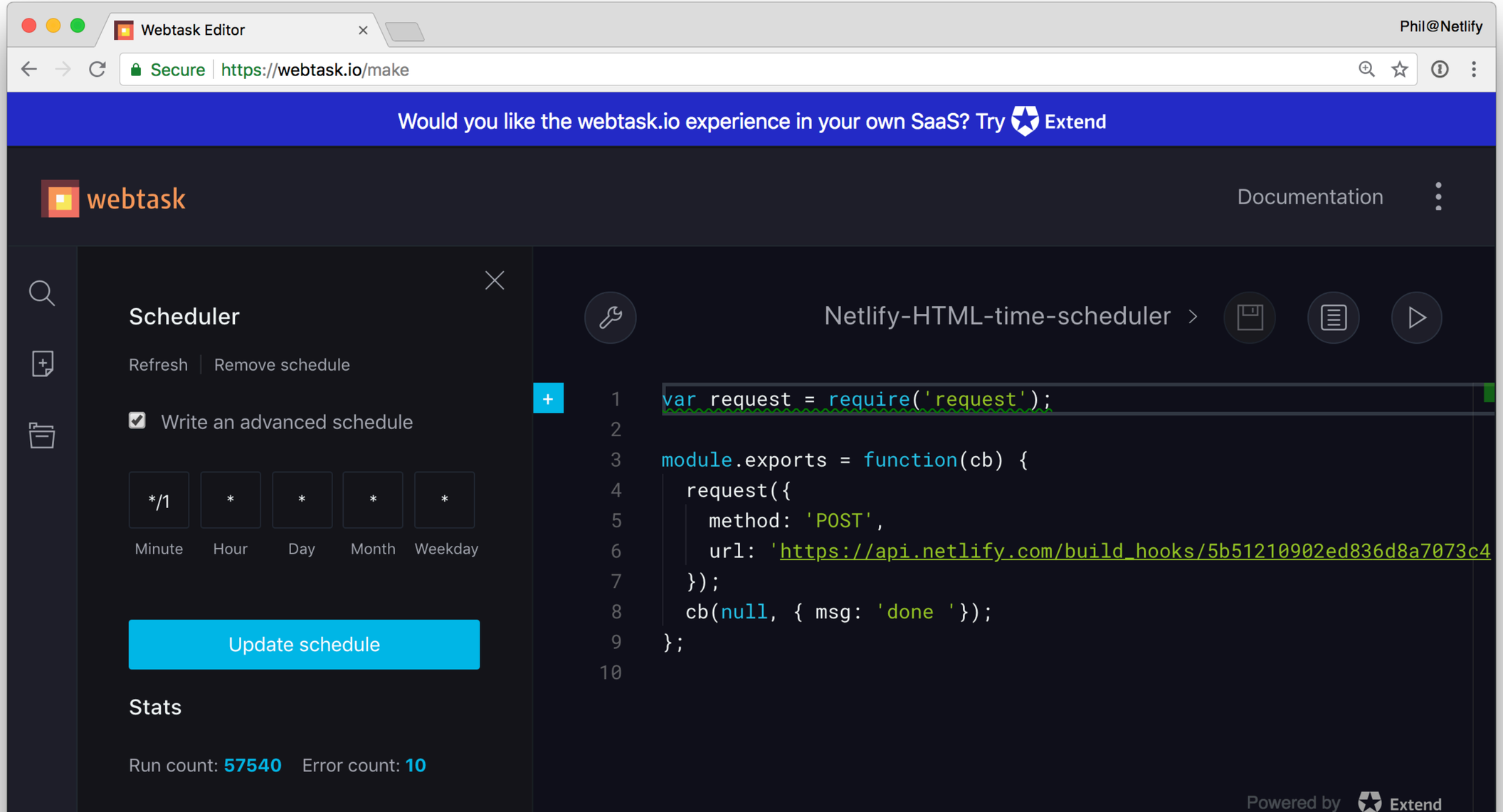


FINDTHAT.AT/TIME

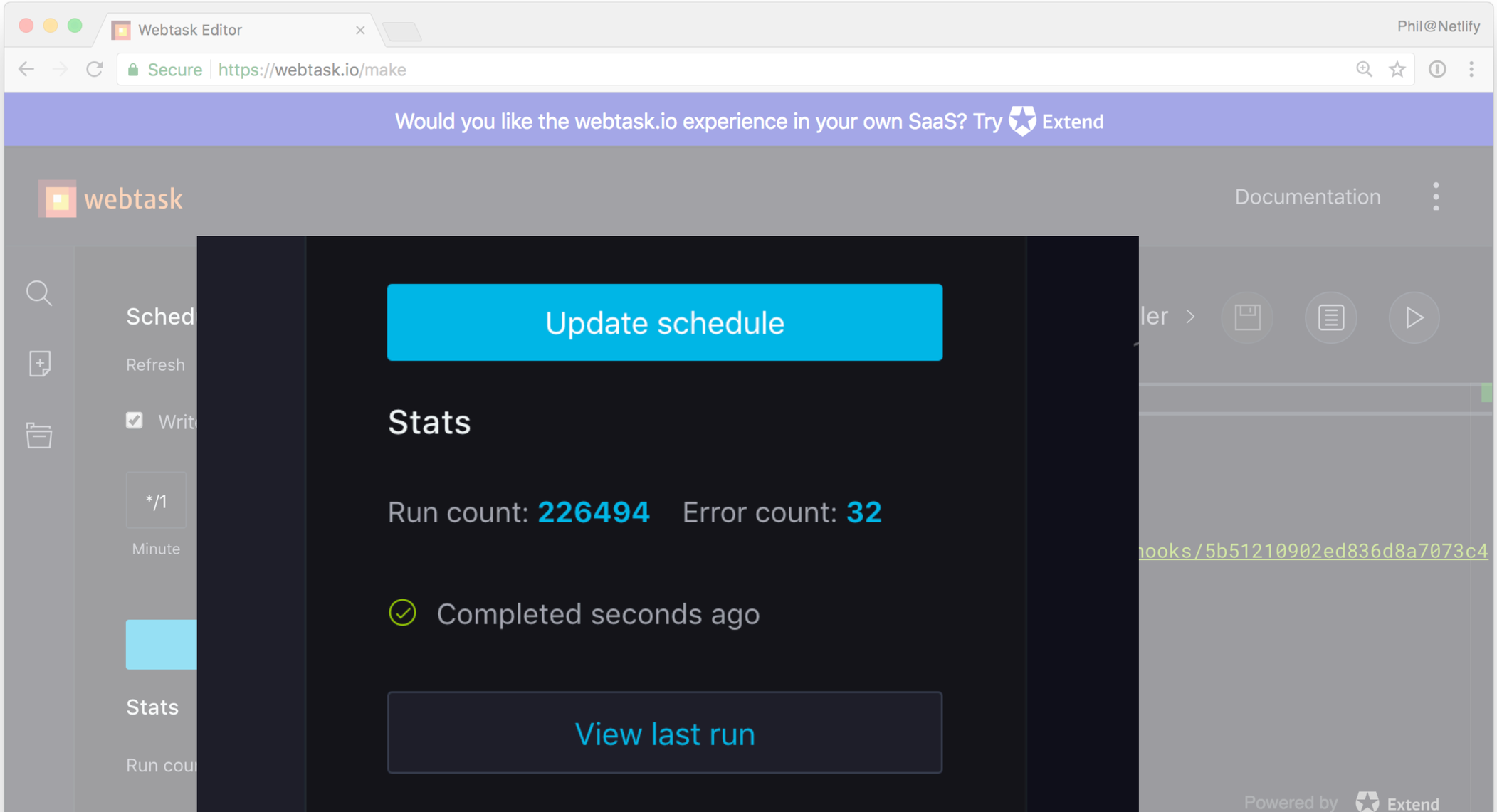
https://setyourwatchby.netlify.com



WEBSTASK.IO

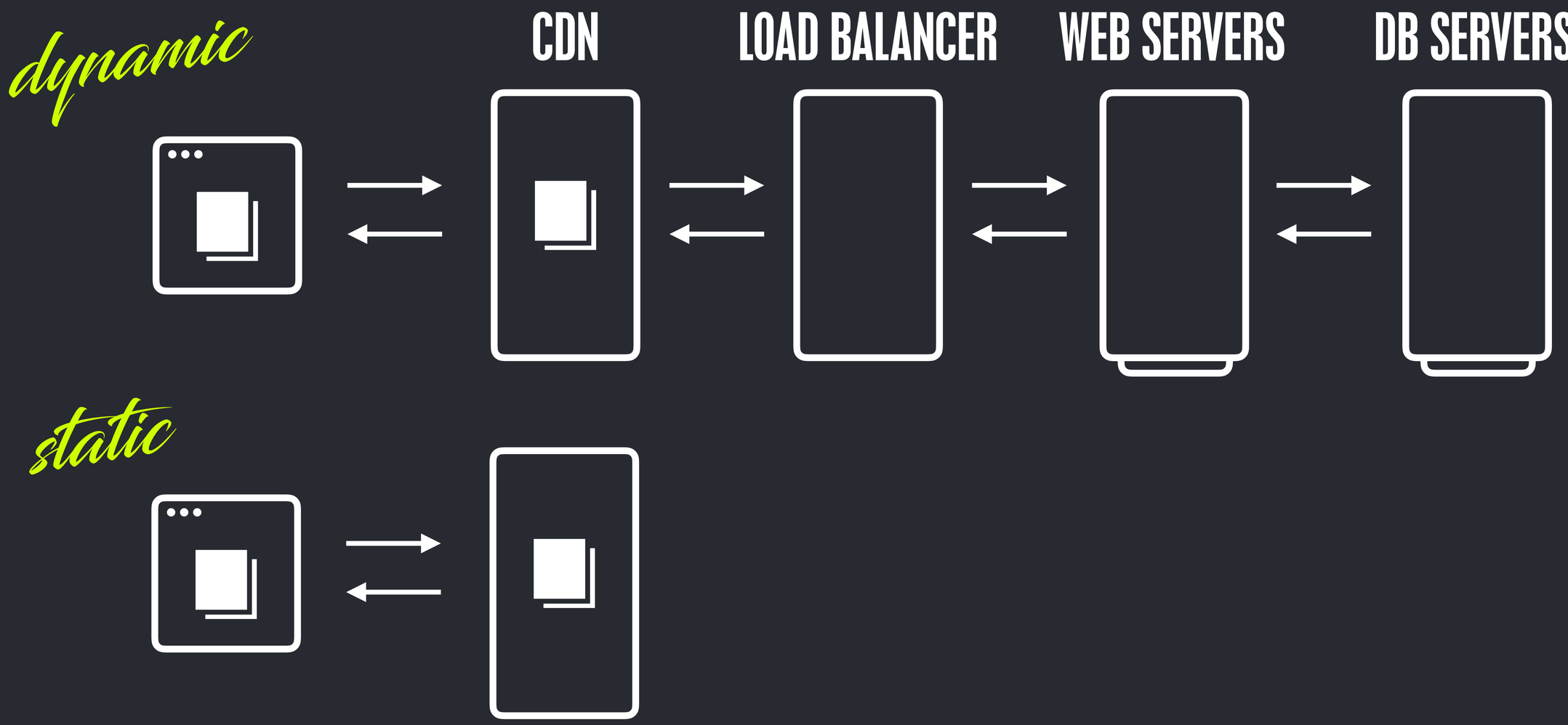

Webtask Editor
Phil@Netlify
Secure | https://webtask.io/make
Would you like the webtask.io experience in your own SaaS? Try Extend
webtask
Documentation
Scheduler
Refresh | Remove schedule
Write an advanced schedule
*/1 * * * *
Minute Hour Day Month Weekday
Update schedule
Stats
Run count: 57540 Error count: 10
Netlify-HTML-time-scheduler
1 var request = require('request');
2
3 module.exports = function(cb) {
4 request({
5 method: 'POST',
6 url: 'https://api.netlify.com/build_hooks/5b51210902ed836d8a7073c4
7 });
8 cb(null, { msg: 'done '});
9 };
10
Powered by Extend

WEBSTASK.IO


Webtask Editor
Phil@Netlify
Secure https://webtask.io/make
Would you like the webtask.io experience in your own SaaS? Try Extend
webtask
Documentation
Update schedule
Stats
Run count: 226494 Error count: 32
Completed seconds ago
View last run
Refresh
*/1
Minute
Stats
Powered by Extend

WHAT, WHY AND HOW TO JAMSTACK

PHIL HAWKSWORTH


dynamic
CDN
LOAD BALANCER
WEB SERVERS
DB SERVERS
static

jamstack can

REDUCE DEPLOYMENT FRICTION

jamstack can

RAISE DEPLOYMENT CONFIDENCE

jamstack can

SIMPLIFY
PERFORMANCE
SECURITY AND SCALE

jamstack can

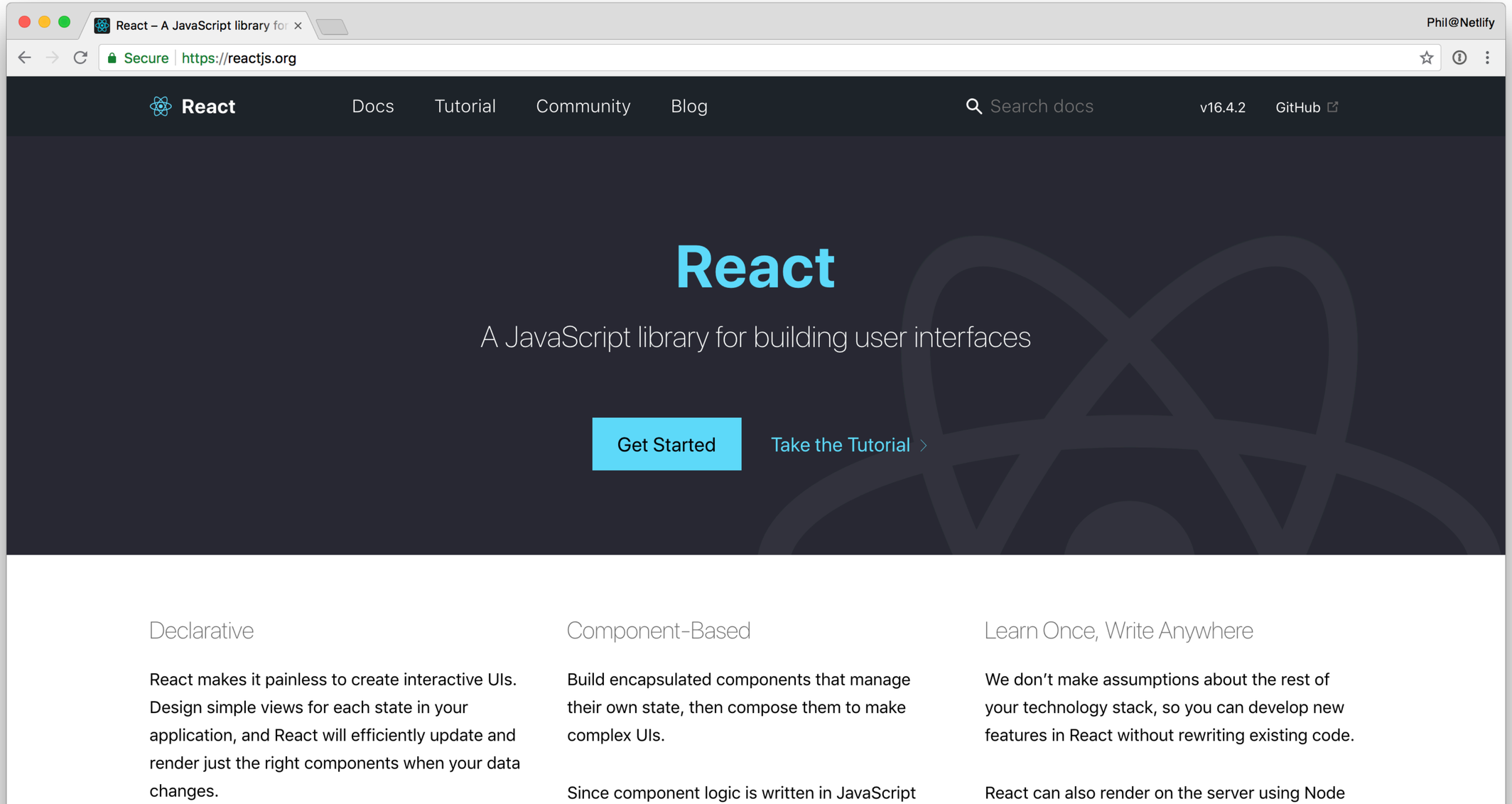
LET YOU DO MORE WITH LESS

WHAT, WHY AND HOW AND WHO TO JAMSTACK

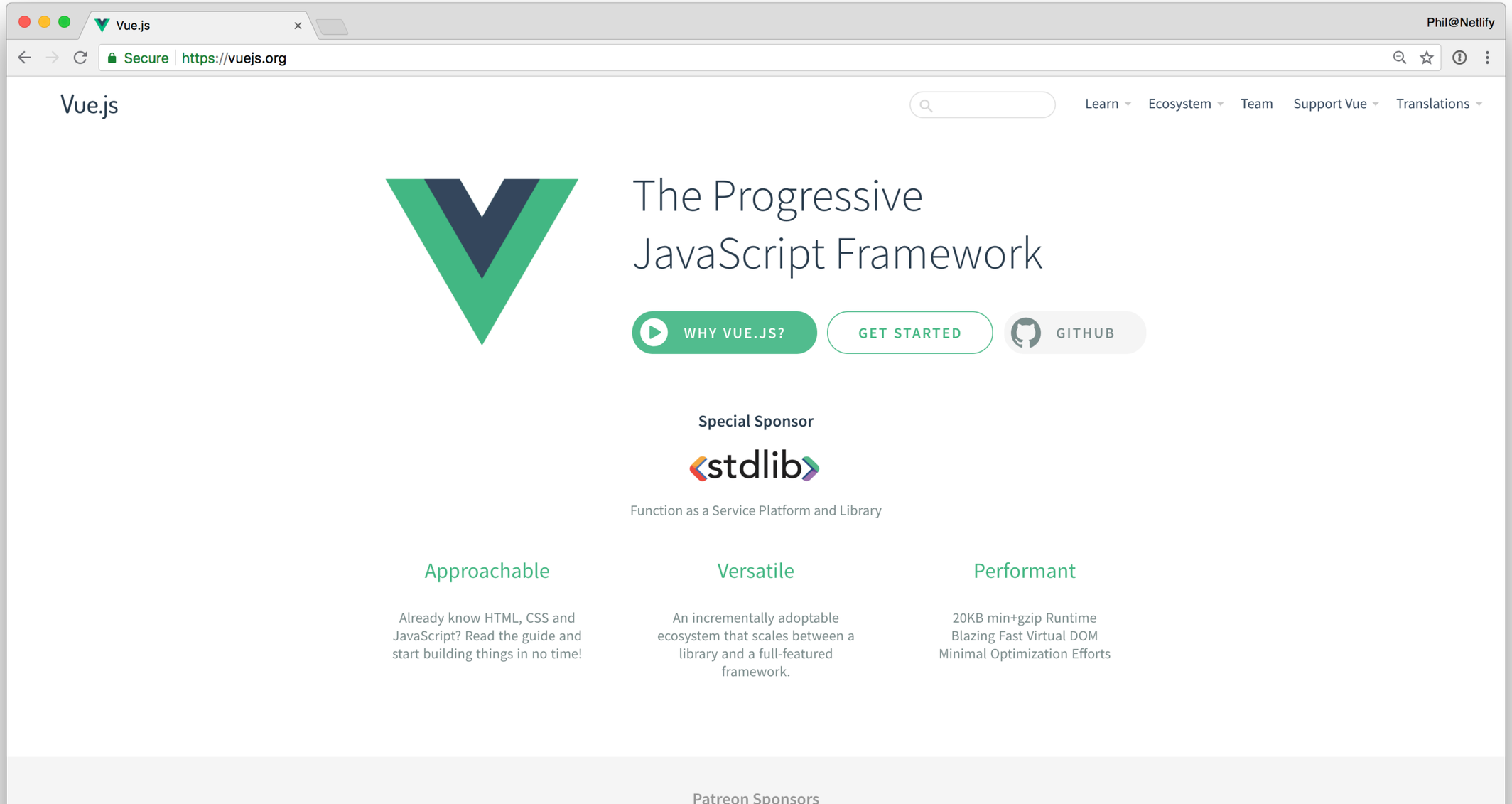
PHIL HAWKSWORTH

netlify

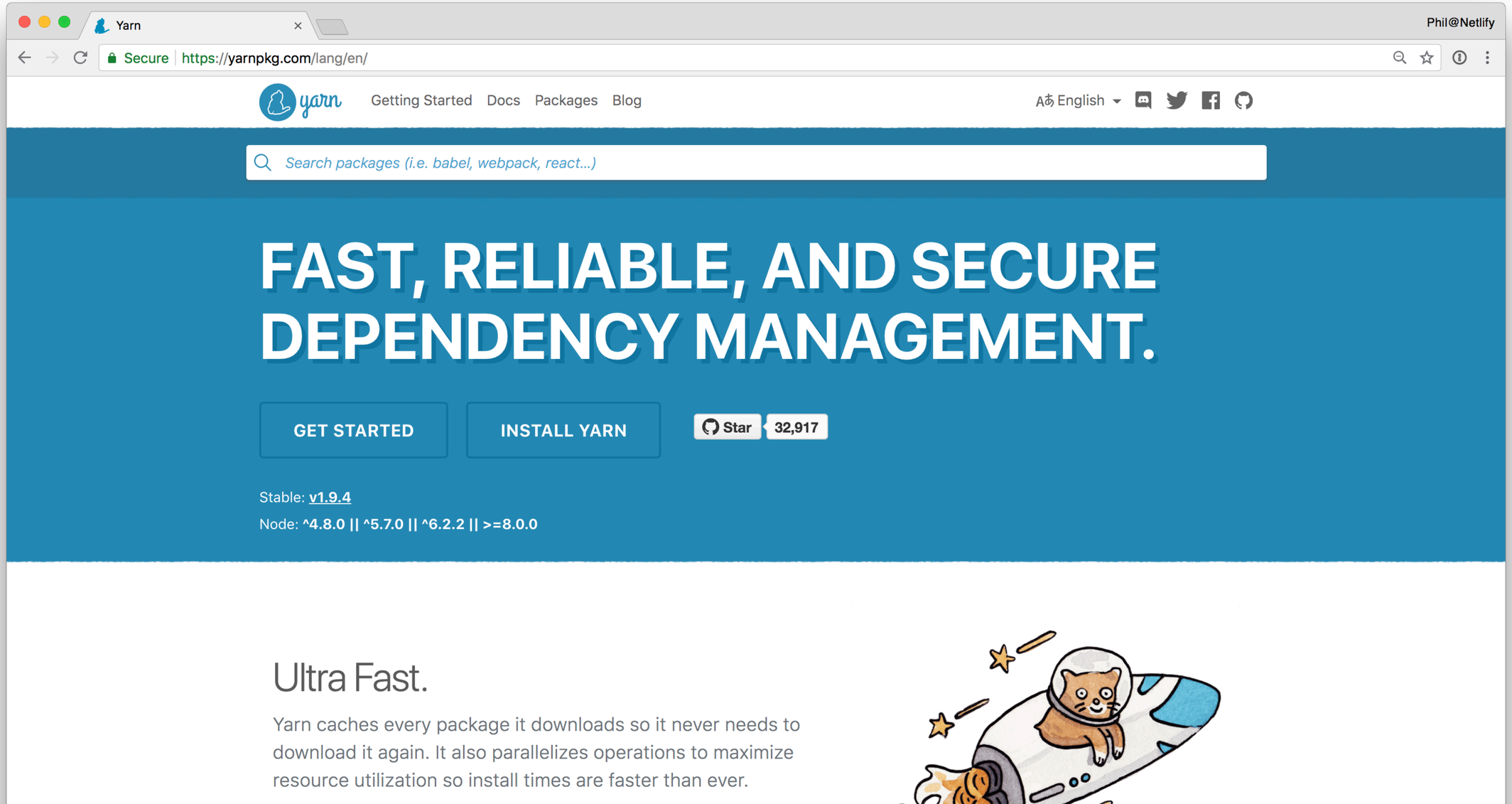
REACTJS.ORG


React – A JavaScript library for
Phil@Netlify
Secure
https://reactjs.org
React
Docs
Tutorial
Community
Blog
Search docs
v16.4.2
GitHub
React
A JavaScript library for building user interfaces
Get Started
Take the Tutorial
Declarative
React makes it painless to create interactive UIs. Design simple views for each state in your application, and React will efficiently update and render just the right components when your data changes.
Component-Based
Build encapsulated components that manage their own state, then compose them to make complex UIs.
Since component logic is written in JavaScript
Learn Once, Write Anywhere
We don't make assumptions about the rest of your technology stack, so you can develop new features in React without rewriting existing code.
React can also render on the server using Node

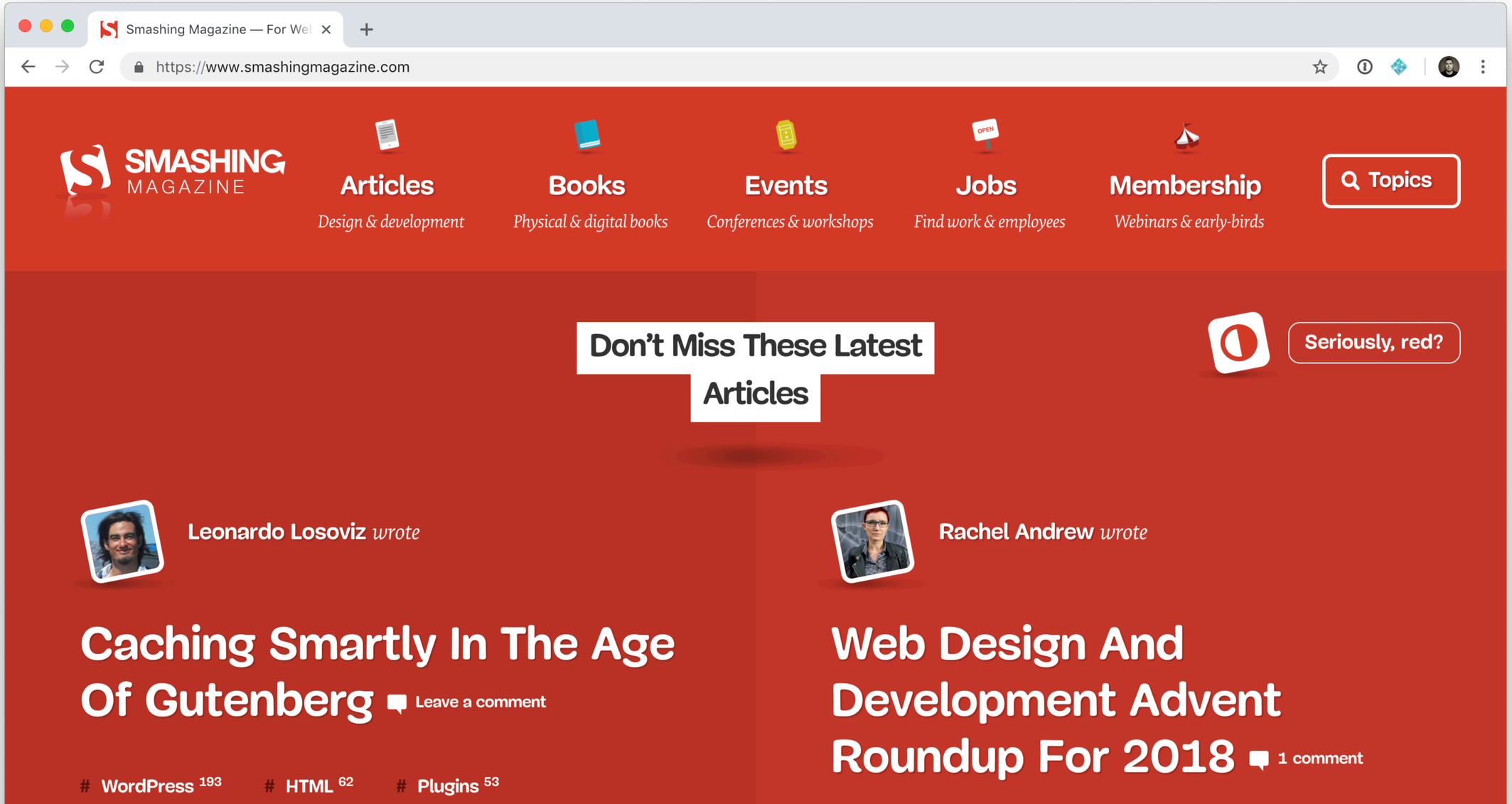
VUEJS.ORG


Vue.js
Phil@Netlify
Secure | https://vuejs.org
Vue.js
Learn
Ecosystem
Team
Support Vue
Translations
The Progressive
JavaScript Framework
WHY VUE.JS?
GET STARTED
GITHUB
Special Sponsor
stdlib
Function as a Service Platform and Library
Approachable
Already know HTML, CSS and JavaScript? Read the guide and start building things in no time!
Versatile
An incrementally adoptable ecosystem that scales between a library and a full-featured framework.
Performant
20KB min+gzip Runtime
Blazing Fast Virtual DOM
Minimal Optimization Efforts
Patreon Sponsors

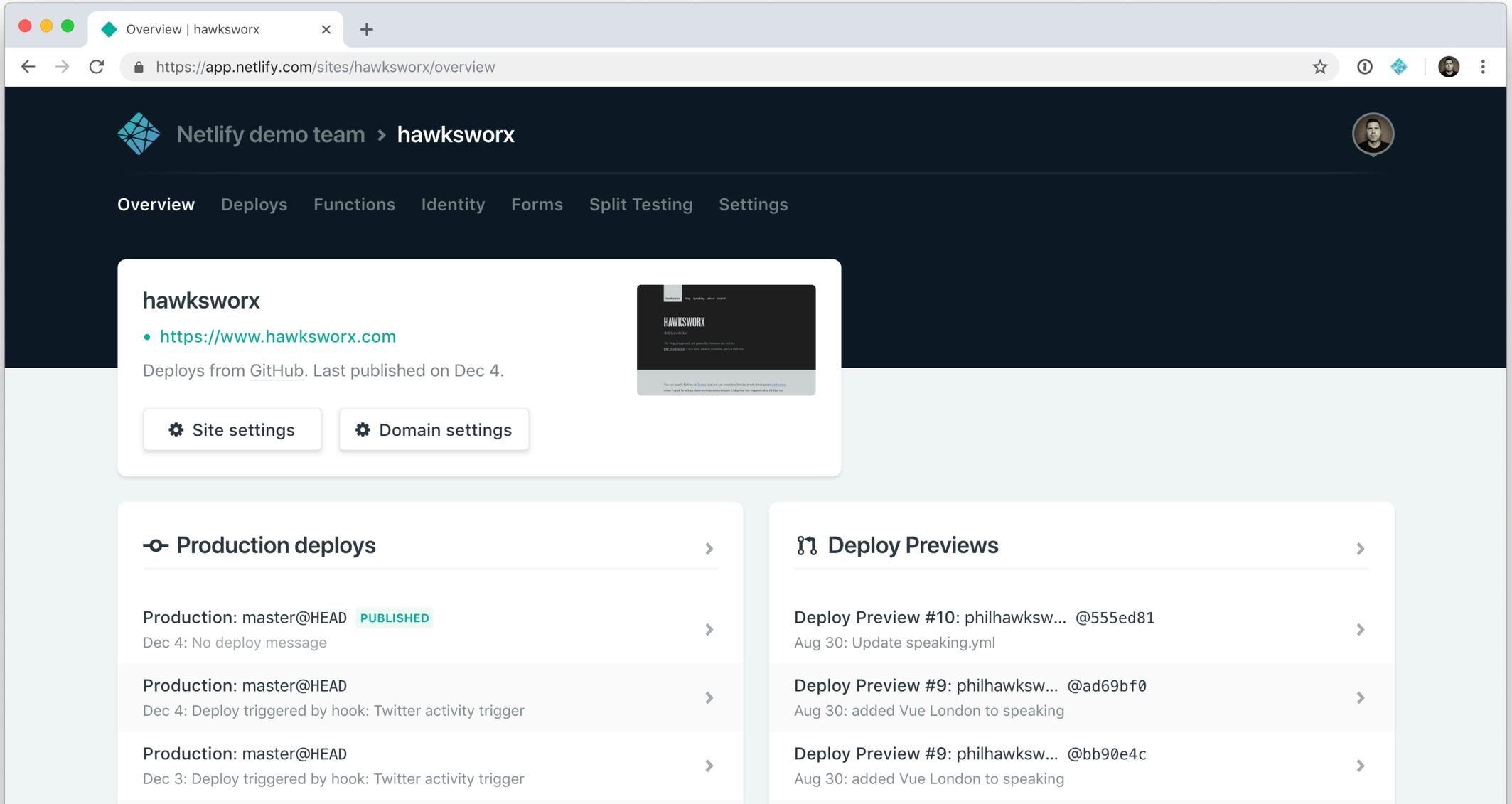
YARNPKG.COM


Yarn
Phil@Netlify
Secure https://yarnpkg.com/lang/en/
yarn
Getting Started
Docs
Packages
Blog
English
Search packages (i.e. babel, webpack, react...)
FAST, RELIABLE, AND SECURE DEPENDENCY MANAGEMENT.
GET STARTED
INSTALL YARN
Star 32,917
Stable: v1.9.4
Node: ^4.8.0 || ^5.7.0 || ^6.2.2 || >=8.0.0
Ultra Fast.
Yarn caches every package it downloads so it never needs to download it again. It also parallelizes operations to maximize resource utilization so install times are faster than ever.

SMASHINGMAGAZINE.COM



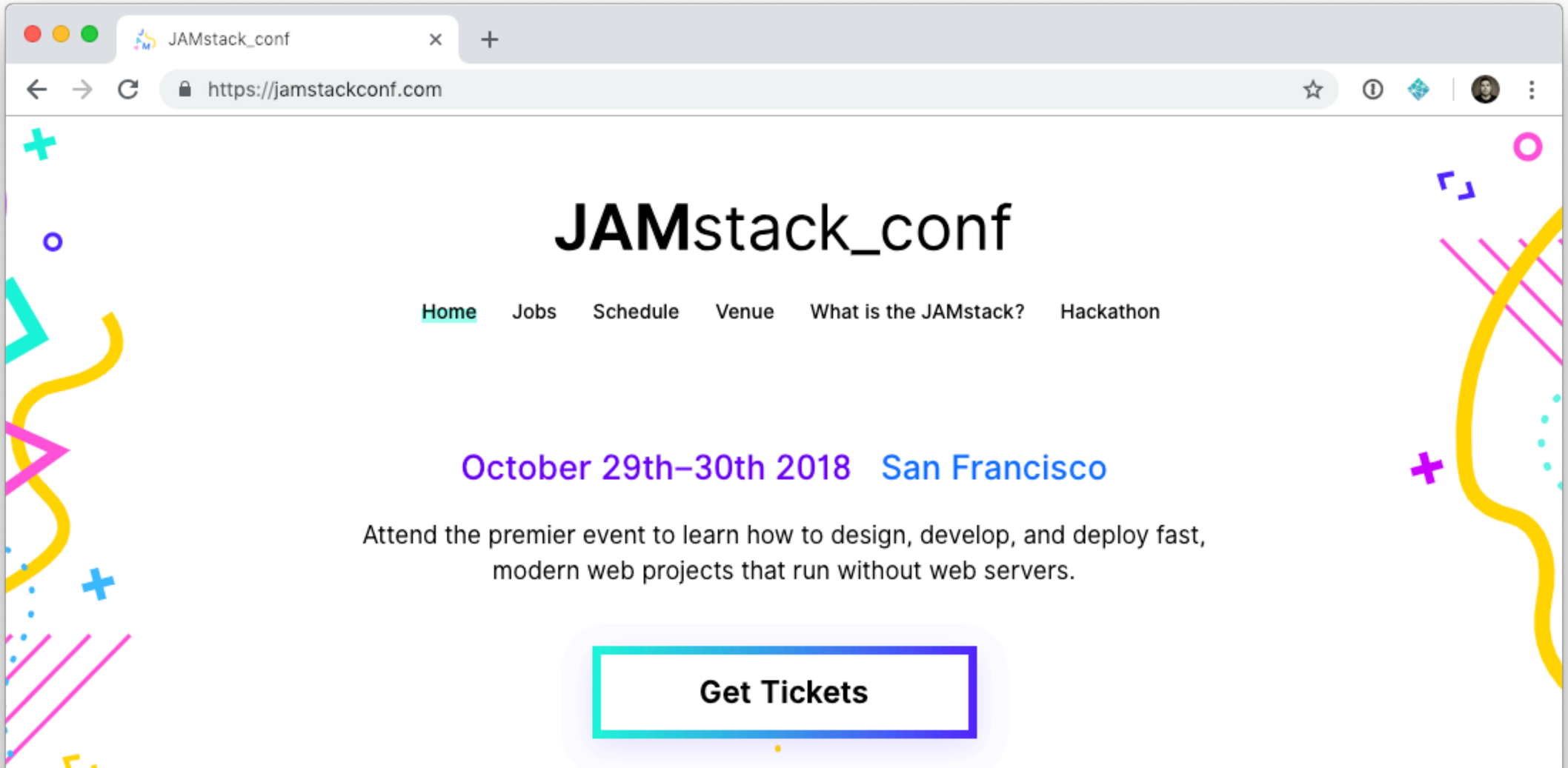
APP.NETLIFY.COM



NETLIFY.COM
IS A JAMSTACK SITE
HOSTED ON NETLIFY
USING NETLIFY
TO NETLIFY NETLIFY

FINDTHAT.AT/CONF

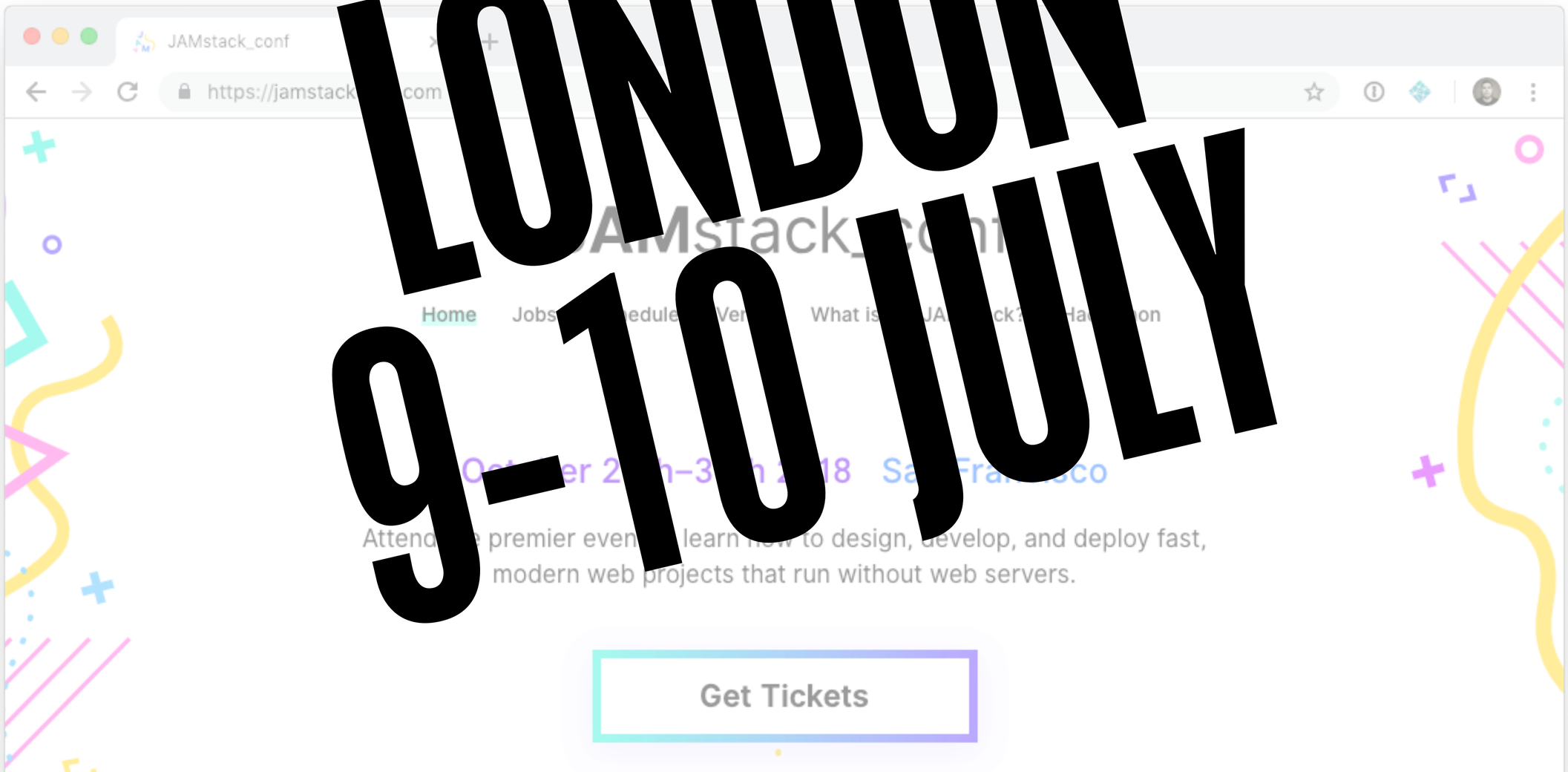
https://jamstackconf.com



FINDTHAT.AT/CONF

https://jamstackconf.com

LONDON 9–10 JULY



STATIC SITE GENERATORS
staticgen.com

NETLIFY
www.netlify.com

SET YOUR WATCH - FRICTION FREE DEPLOYMENTS
https://www.netlify.com/blog/2018/08/02/exploring-the-potential-of-friction-free-deployments/

ONE-CLICK TEMPLATES
templates.netlify.com

PHIL'S OWN JAMSTACK SITE
hawksworx.com

HEADLESS / DECOUPLED CMS
headlesscms.org

ABOUT THE JAMSTACK / COMMUNITY
jamstack.org

THE NEW DYNAMIC
www.thenewdynamic.org/

THANKS

FINDTHAT.AT/OGNJAM

@PHILHAWKSWORTH