



Git and GitHub

Learning, Best Practices and Résumés

Alyson La & Matthew McCullough

2014-12-15

Guest Speakers



Alyson La • GitHub
 @realalysonla



Matthew McCullough • GitHub
 @matthewmccull



Git and GitHub

Learning, Best Practices and Résumés

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GitHub: Open Source

Recursively sharing work for others to build upon

Alyson's handiwork

alysonla / **hubber-memory-game**

Watch 1 Unstar 13 Fork 8

The classic memory game, with your favorite hubbers <http://alysonla.github.io/hubber-memory-game>

27 commits 1 branch 0 releases 3 contributors

branch: **gh-pages** + hubber-memory-game / +

| fix merge conflict | alysonla authored on Nov 7 | latest commit d20397798f |
|--------------------|-------------------------------------|--------------------------|
| images | changing the background and font | a year ago |
| js | add stuff | a month ago |
| media | changing the background and font | a year ago |
| styles | fix merge conflict | a month ago |
| .ruby-version | MatchHub v2 | a year ago |
| README.md | add deets about local dev to README | a month ago |
| contributing.md | Create contributing.md | 11 months ago |
| favicon.ico | add a favicon | a year ago |
| index.html | Update index.html | 2 months ago |

Code Issues 4 Pull Requests 0 Wiki Pulse Graphs

HTTPS clone URL: <https://github.com/> [Clone](#)

You can clone with [HTTPS](#), [SSH](#), or [Subversion](#).

[Clone in Desktop](#) [Download ZIP](#)

Alyson's handiwork

Hubber Matching Game

Elapsed time: 00:55



Matthew's handiwork

matthewmccullough / dotfiles

Watch 15 ⌂ Unstar 135 ⌂ Fork 67 ⌂

Shell Config — Edit

214 commits 1 branch 1 release 2 contributors

branch: master dotfiles / +

Updated oh-my-zsh to latest

| | | |
|---|---|--|
|  matthewmccullough | authored on Nov 10 | latest commit 4ca02f5126  |
|  oh-my-zsh @ df5b09e | Updated oh-my-zsh to latest | a month ago |
|  scripts @ 40b2461 | Visualization tool for Git repos | 8 months ago |
|  vim | Ignoring netrwhist history | 2 years ago |
|  z-rupa @ dfd4308 | Added z-rupa | 2 years ago |
|  z-zsh @ 052a6cb | Added z-zsh quick directory switcher | 3 years ago |
|  .gitignore | Separating the global git ignore from the repo-specific one | 3 years ago |
|  .gitmodules | Changing submodules to use HTTPS protocol | a year ago |
|  LICENSE | License these scripts as CC-BY 3.0 | a year ago |

Code Issues Pull Requests Wiki Pulse Graphs Settings

HTTPS clone URL <https://github.com/r> 

You can clone with [HTTPS](#), [SSH](#), or [Subversion](#).

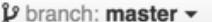
Matthew's handiwork

 matthewmccullough / **scripts**

 Watch ▾ 9  Unstar 137  Fork 43

A series of Bash and ZShell scripts — Edit

 92 commits  2 branches  0 releases  3 contributors

  branch: master  scripts / + 

Visualization tool for Git history

| File | Description | Time Ago |
|---|---|-------------|
|  beep-timer-ignite | First commit of Matthews scripts | 4 years ago |
|  .gitignore | Ignoring Matthew's specific pinboard backup | 3 years ago |
|  LICENSE | License these scripts as CC-BY 3.0 | a year ago |
|  README.md | Adding a README and license | 4 years ago |
|  ReComment.scpt | First commit of Matthews scripts | 4 years ago |
|  ackgradle | Ack parameterized invocation to search gradle files | 4 years ago |
|  bamboo | Renamed all scripts to have no filename extension | 3 years ago |

 Code

 Issues 0

 Pull Requests 4

 Wiki

 Pulse

 Graphs

 Settings

HTTPS clone URL
<https://github.com/r/> 

Team handiwork

GitHub Training

Trainers Classes Schedule Kit Contact



Foundations

Core skills for day-to-day use of Git on the command line and GitHub workflows



Intermediate

Important command line skills and problem solving processes



Advanced

Command line deep dive, problem solving techniques, and GitHub efficiencies

Open source training content

Present your way to better version control.

Cheat Sheets

Looking for a quick reference sheet of Git commands?

We've got just the document, available for download in these languages:



Community contributions

Would you like to update or clarify content in the slides or workbooks? Just fork the repository, make your changes, and submit a Pull Request.

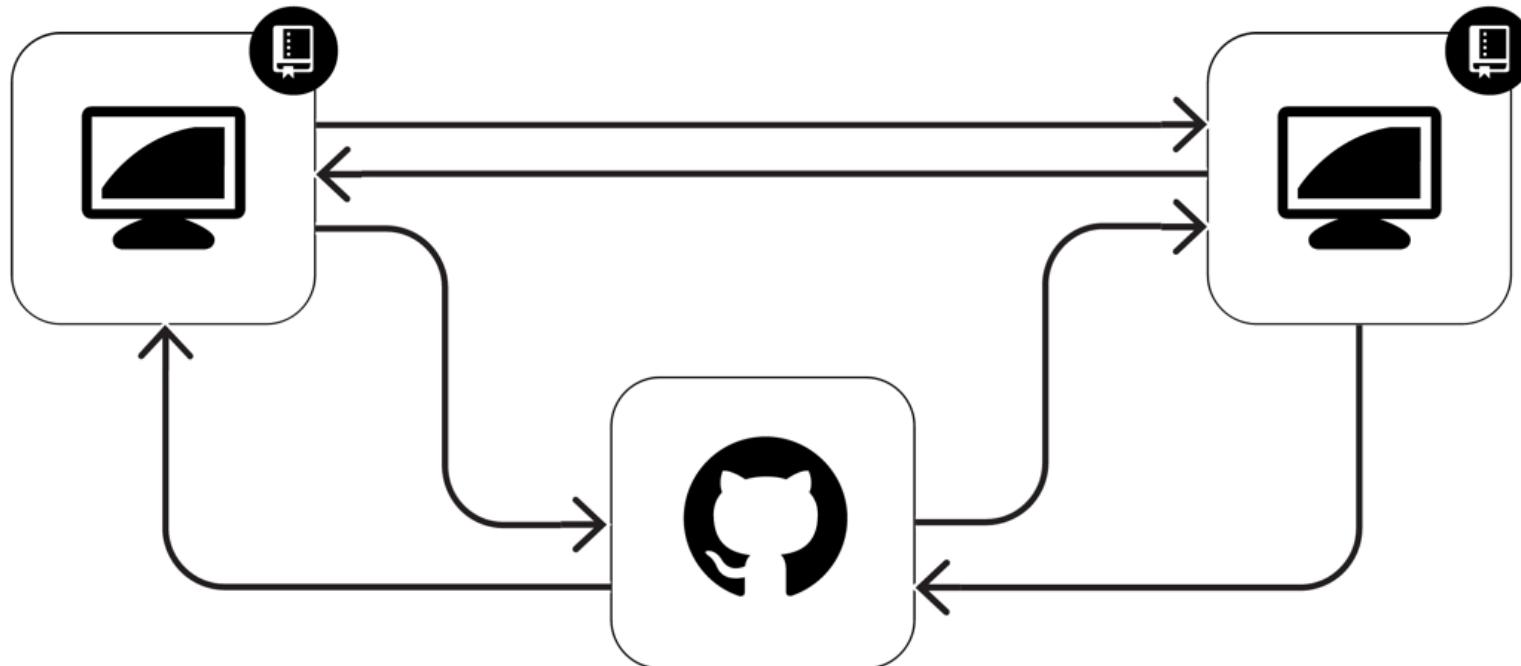
[Head over to the github/training-kit repository](#)

Team handiwork

Table of Contents

- [Understanding version control](#)
- [Surveying the GitHub platform](#)
- [Creating a hosted repository](#)
- [Touring content versioning on GitHub](#)
- [Acquiring repositories locally](#)
- [Exploring the GitHub Flow](#)
- [Syncing local and GitHub repos](#)
- [Visualizing changes with GitHub](#)
- [Using GitHub Pages](#)
- [Managing projects](#)
- [Using GitHub Flavored Markdown](#)
- [Additional resources](#)

-
- Slides Only
 - Timer



GitHub: Learning

Expanding your coding horizons

Curated Discovery

- Keep up to date with what's happening in your area of expertise
- Trending repos (mailing list or page) are a great barometer
- Curated showcases are a great “who’s who” list

Explore Showcases

Explore GitHub

All

Showcases

Trending

Stars

Explore

Browse interesting projects, solving all types of interesting problems.



Text editors



Front-end JavaScript
frameworks



DevOps tools



Writing

These tools help you manage servers and deploy happier and more often wi...

14 4

Explore Trending

Explore GitHub

All

Showcases

Trending

Stars

Trending repositories

Find what repositories the GitHub community is most excited about today.

Repositories

Developers

Trending: **today** ▾

All languages

Unknown languages

CSS

CoffeeScript

JavaScript

Objective-C

Python

Ruby

Shell

[mewwts/addict](#)

The Python Dict that's better than heroin.

Python • 324 stars today • Built by 

★ Star

[shazow/ssh-chat](#)

Chat over SSH.

Go • 221 stars today • Built by 

★ Star

☰ Other: Languages ▾

Directed Discovery

- Search lets you start as broad as repos and go as narrow as specific files
- Language and recency are great filters

Search by Language

Advanced search

Advanced options

From these owners

In these repositories

Created on the dates

>YYYY-MM-DD, YYYY-MM-DD

Written in this language

Repositories options

With this many stars

Historical Reference

- Great pull requests teach you bad & good interaction patterns
- Demonstrate automated testing, discussion, merge-ability
- Look for merged and unmerged closed pull requests with a lot of discussion

Active Pull Requests



gerardkcohen commented 3 days ago

@patrickhlauke Thanks for looking into the `role="heading"` @stevefaulkner is the man! Based on the resource pointed out, our previous decision of `role="separator"` is also invalid?

Now, regarding keyboard/ power users, I think the simple approach you are proposing is good for only a few links at most. At a certain point, expecting a user to have to tab through a number of items to move to the next menu or element in tab order will be very frustrating. I am not sure we can guarantee that only a few items will ever be used. With JS becoming more of a first class citizen on more and more OS's, we can't even assume it will only be used in traditional browser.

I don't know, maybe I am just playing devil's advocate. If you guys decided one way or the other, I am more than happy to oblige. My only goal is to contribute and make Bootstrap more accessible for all, however that may be. I can take a look into the `SHIFT+TAB` issue you previously mentioned once we figure out which way to go.

cc: @cvrebert

Vocabulary Growth

- Experts have command line proficiency even if they use GUIs
- GitHub has a dedicated CLI maintained by Hubbers and public contributors
- More than half the Git commands are available only in the CLI
- Command line knowledge leads to automation

Command Line Skills



documentation: [man_hub](#)

hub is a command-line wrapper for git that makes you better at GitHub .

```
# install on OS X for 2.x preview
$ brew install --HEAD hub
```

```
# install from source for 2.x preview
# you need a Go development environment: http://golang.org/doc/install
$ git clone https://github.com/github/hub.git
$ cd hub
$ ./script/build
$ cp hub YOUR_BIN_PATH
```

Git Vocabulary

Git Reference

[Reference](#) [About](#) [§](#) [Site Source](#)

Getting and Creating Projects

- [init](#)
- [clone](#)

Basic Snapshotting

- [add](#)
- [status](#)
- [diff](#)
- [commit](#)
- [reset](#)
- [rm, mv](#)
- [stash](#)

Branching and Merging

- [branch](#)
- [checkout](#)
- [merge](#)
- [log](#)
- [tag](#)

INTRODUCTION TO THE GIT REFERENCE

This is the Git reference site. It is meant to be a quick reference for learning and remembering the most important and commonly used Git commands. The commands are organized into sections of the type of operation you may be trying to do, and will present the common options and commands needed to accomplish these common tasks.

Each section will link to the next section, so it can be used as a tutorial. Every page will also link to more in-depth Git documentation such as the official manual pages and relevant sections in the [Pro Git book](#), so you can learn more about any of the commands. First, we'll start with thinking about source code management like Git does.

HOW TO THINK LIKE GIT

The first important thing to understand about Git is that it thinks about version control very differently than Subversion or Perforce or whatever SCM you may be used to. It is often easier to learn Git by trying to forget your assumptions about how version control works and try to think about it in the Git way.

Let's start from scratch. Assume you are designing a new source code management system. How did you do basic version control before you used a tool for it? Chances are that you simply copied your project directory to save what it looked like at that point.

GitHub: Best Practices

Efficiency, polish and proficiency

Great repos explain

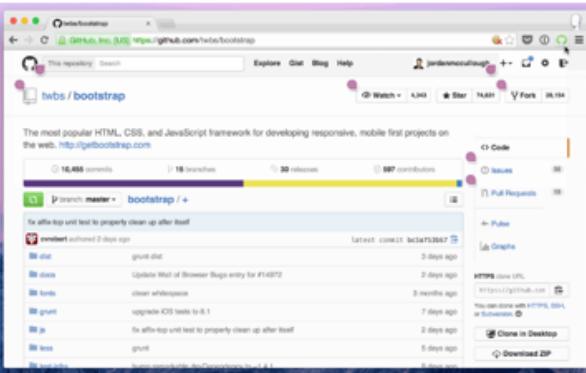
- Value
- Usage
- Contributions

README.md

Google Chrome Help.GitHub.com extension

What is it

Provides in-the-browser interactive mouse-over tooltips and links driven by Help.GitHub.com for new GitHub.com users.



The screenshot shows a tooltip from the extension over a GitHub repository page for 'twbs/bootstrap'. The tooltip displays information such as '16,485 commits', '18 branches', '30 releases', and '667 contributors'. It also lists recent commits, including 'fix affix top unit test to properly clean up after itself' by 'emrebert' and 'update Wall of Browser Bugs entry for #14872' by 'dave'. The tooltip is styled with a purple background and white text, matching the GitHub theme.

How does it work

Selectors, whether `id`, individual `class`, or attribute based are all that's needed to identify an element on a GitHub.com page. The `data/help-map.json` provides the easy-to-edit mapping of elements to `help.github.com` article URLs. Everything else is handled with just a little `bit of javascript`.

Installation

1. Launch [Google Chrome](#)
2. Browse to `chrome://extensions`
3. Enable [Developer mode](#)
4. Drag repo folder into Extensions page
5. Start using it

Special files inform

- README.md
- CONTRIBUTING.md
- LICENSE

| | | |
|---------------------------------|---|---------------|
| CONTRIBUTING.md | (doc) Recommend git checkout -b in CONTRIBUTING.md | 6 months ago |
| Gemfile | Merge pull request #3368 from kylog/issue/pup-2563/remove-1.8.7 | 11 days ago |
| LICENSE | Updating copyright years in LICENSE | 11 months ago |
| README.md | (maint) Update docs badge in README | 6 months ago |
| Rakefile | (PUP-2563) Remove rubocop task's check for ruby 1.8.7 | 11 days ago |
| install.rb | (maint) Replace Facter[],value calls with just Facter.value. | 20 days ago |

README.md

Puppet

[build](#) passing [docs](#) green

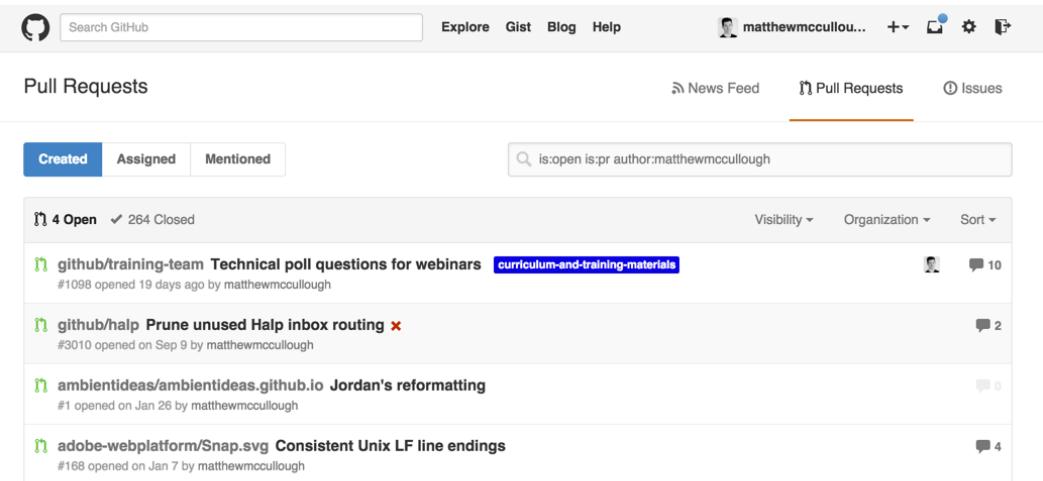
Puppet, an automated administrative engine for your Linux, Unix, and Windows systems, performs administrative tasks (such as adding users, installing packages, and updating server configurations) based on a centralized specification.

Documentation

Documentation for Puppet and related projects can be found online at the [Puppet Docs](#) site.

Summarize queues

- Issues
- Pull Requests
- Allows for easy daily review



The screenshot shows the GitHub interface for managing pull requests. At the top, there's a navigation bar with links for Explore, Gist, Blog, Help, and a user profile for matthewmccullough. Below the navigation is a search bar and a filter bar with tabs for Created, Assigned, and Mentioned. A search input field contains the query "is:open is:pr author:matthewmccullough". The main content area is titled "Pull Requests" and displays a list of four open pull requests:

- github/training-team Technical poll questions for webinars curriculum-and-training-materials #1098 opened 19 days ago by matthewmccullough
- github/halp Prune unused Halp inbox routing #3010 opened on Sep 9 by matthewmccullough
- ambientideas/ambientideas.github.io Jordan's reformatting #1 opened on Jan 26 by matthewmccullough
- adobe-webplatform/Snap.svg Consistent Unix LF line endings #168 opened on Jan 7 by matthewmccullough

At the bottom of the page, there's a ProTip! message: "ProTip! Type g and then ↵ on any issue or pull request to go back to this listing page."

GitHub: The Résumé

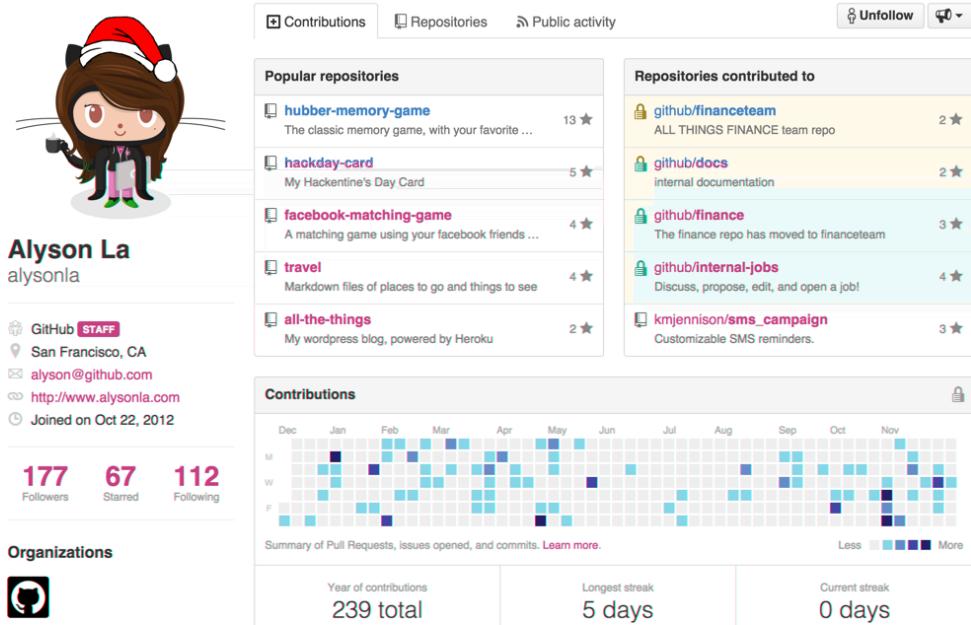
Showcasing your knowledge to the world

Contribution Types

- Open detailed issues when you discover bugs
- Answer questions in Issue threads
- Write and improve documentation
- These all add to your contribution graph
- A documentation pull request is the easiest to craft and get merged
- Next, consider contributing tests to an OSS project

Contribution Graph

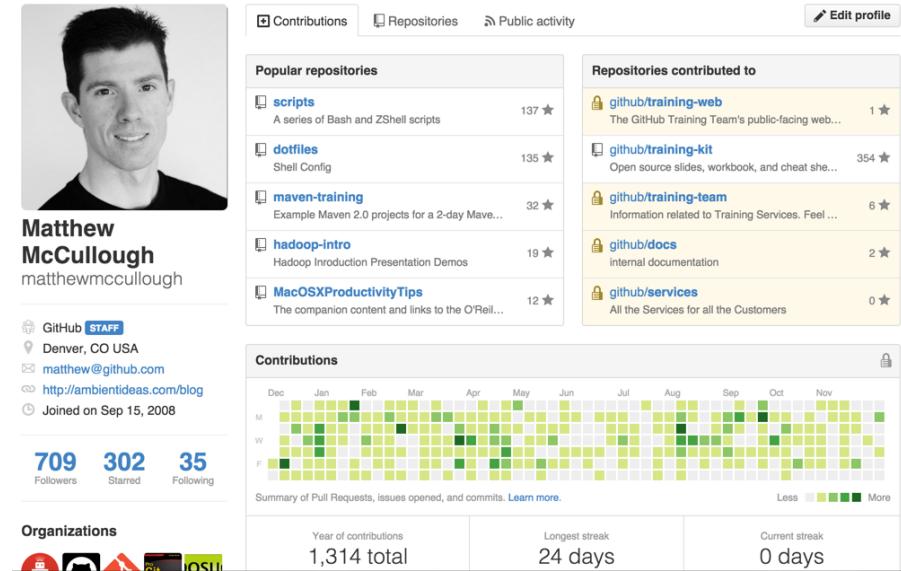
- Shows your contributions in a concise manner



Contribution Graph



- Streaks are a signal
- Broad contributions show community investment



Showcase

- Use GitHub Pages for a personal blog
- Build a web site for the OSS project you're most likely to invest a lot of time in

Personal Blog



You've Been Haacked

...and you like it

[about](#)
[archives](#)
[contact](#)
[contributors](#)

You've been haacked and

Git and GitHub Resources

📅 December 3, 2014 ↗ git github 💬 9 comments 📝 edit

Learning Git and GitHub can be daunting if you're new to it. I recently gave a small presentation where I pretty much firehosed a group of people about Git and GitHub for one hour. I felt bad that I could only really scratch the surface.

I thought it might be useful to collect some resources that have helped me understand Git and GitHub better. If you only read one thing, read [Think like a git](#). That'll provide a good understanding and maybe motivate you to read the others.

Git

- [Pro Git](#) If you have time to read a full book, read this one. It's free!

Passion Project



Code Guide by @mdo

Standards for developing flexible, durable, and sustainable HTML and CSS.



Project Directory



Microsoft on GitHub

Search all Microsoft repos...



Home

sitory is the starting point for people to learn about ASP.NET 5.



82

7822

1635 ★ stars 377 ⚡ forks



All Repos

corefx

This repository contains the foundational libraries that make up the .NET Core

5865 ★ stars 892 ⚡ forks

dotnet

dotnet is the official home of .NET on GitHub. It's a great starting point to find many .NET OSS

4777 ★ stars 556 ⚡ forks

TypeScript

TypeScript is a superset of JavaScript that compiles to clean JavaScript output.

3045 ★ stars 260 ⚡ forks

Project Directory

The screenshot shows the homepage of the IBM Open Source at GitHub. The top navigation bar features the IBM logo on the left and the IBM dW logo on the right. The main title "IBM Open Source at GitHub" is centered above a green banner. The banner contains the text "Enhance your GitHub experience with IBM DevOps Services »". Below the banner is a blue bar with the text "Deploy your application to BlueMix cloud platform ». At the bottom of the page, there's an orange button with the text "See more IBM OSS content on developerWorks »". The footer includes a search bar labeled "SEARCH OUR REPOS...", a "CENT" logo, and a "RE" logo. The footer also lists several projects: "v8" (JavaScript), "ibm-js.github.io" (CSS), "sample.batch.bonuspayout" (Java), and "PO" (Partial Order). The footer text "part of Google V8 javascript engine to S390/zLinux" and "HTML Custom Element / Widget infrastructure" is visible.

part of Google V8 javascript engine to S390/zLinux

HTML Custom Element / Widget infrastructure

POS(182)

Project Directory

After you've tackled that, check out the [Iron ACME Air](#) and [Flux Capacitor](#) zone, and the

NETFLIX OSS Netflix Open Source Software Center

[Repositories](#) [Powered By NetflixOSS](#)

Our Repositories [Thumbnail View](#) [List View](#) **49 public repos** **198 members**

Availability

HYSTRIX  **SIMIANARMY**  **TURBINE** 

Cloud Management

ICE **ASGARD** **FRIGGA** **GLISTEN**

Mailing Lists

We maintain mailing lists for some of our open source projects. Click on the following links to subscribe and/or maintain your subscriptions.

- [Asgard Mailing List](#)
- [Astanax Mailing List](#)
- [Curator Mailing List](#)
- [Exhibitor Mailing List](#)
- [SimianArmy Mailing List](#)

Stay in Touch

- [Netflix Tech Blog](#)
- [@NetflixOSS](#)
- [Slideshare](#)
- [Netflix Meetup](#)
- [Jobs at Netflix](#)

Project Directory



open source

Twitter is built on
open source
software.

Want to help? [Join the Flock](#)

Visit dev.twitter.com

[Logos and other goodies](#)

Statistics

116 public repos

157 members

opensource@twitter.com

Recently updated

[View All on GitHub](#)

[scalding](#) Dec 14, 2014 · 1836 stargazers · 412 forks

[ambrose](#) Dec 13, 2014 · 963 stargazers · 158 forks

[twitter-text-js](#) Dec 13, 2014 · 1297 stargazers · 194 forks

twemoji

JavaScript

Twitter Emoji for Everyone

typeahead.js

JavaScript

typeahead.js is a fast and fully-featured autocomplete library

twitter-text

JavaScript

Twitter Text Libraries

Resume Builders

- Open source just about everything
- Accept just about every pull request
- Leverage CONTRIBUTING.md for shaping contributions
- Learn to mentor those contributing
- Start by contributing to well-known OSS, even with just doc fixes and bug reports

Q&A

Ask us anything

Other References

- Explore: <https://github.com/explore>
- Search: <https://github.com/search>
- Advanced Search: <https://github.com/search/advanced>
- Search syntax: <https://help.github.com/articles/search-syntax/>
- Contributing guidelines: <https://github.com/blog/1184-contributing-guidelines>
- README rendering: <https://github.com/github/markup>
- Good PR: <https://github.com/twbs/bootstrap/pull/15263>
- Training Materials: <https://training.github.com/kit>
- Keyboarding: <https://help.github.com/articles/using-keyboard-shortcuts/>
- Repo exemplifying best practices: <https://github.com/puppetlabs/puppet>
- Alyson's favorite things: <http://bit.ly/1zn0Ac0>

Project Directory References

- <http://netflix.github.io>
- <http://ibm.github.io>
- <http://facebook.github.io>
- <http://twitter.github.io>