

Data-Driven Static Site Generation



@carlmjohnson

What is a static site
generator?

StaticGen

Top Open-Source Static Site Generators

SHARE

All languages

Sorted by stars

About StaticGen The Rules

Jekyll

jekyllrb.com

★	📄	👤
27074	5967	117
74 ▲	18 ▲	-11 ▼

A simple, blog-aware, static site generator.

Language: Ruby
Templates: Liquid
License: MIT

GitBook

www.gitbook.com/

★	📄	👤
13157	1589	560
49 ▲	4 ▲	3 ▲

A modern publishing toolchain. Simply taking you from ideas to finished, polished books.

Language: JavaScript
Templates: Jijja2
License: APL 2.0

Hexo

hexo.io/

★	📄	👤
12333	1985	322
31 ▲	18 ▲	-2 ▼

Hexo is a fast, simple and powerful blog framework.

Language: JavaScript
Templates: EJS, Swig
License: MIT

Hugo

gohugo.io/

★	📄	👤
11921	1903	316
122 ▲	21 ▲	3 ▲

A Fast and Flexible Static Site Generator.

Language: Go
Templates: Go Templates
License: APL 2.0

Octopress

octopress.org

Pelican

blog.getpelican.com/

Brunch

brunch.io/

Middleman

middlemanapp.com

Popular Static Site Generators

<http://www.staticgen.com/>

Why Static Site Generation?



Pros

- ✦ *Virtually free hosting*
- ✦ *No security worries*
- ✦ *Easy to run locally*
- ✦ *Easy backup*
- ✦ *Markdown support*
- ✦ *Use Git for content*

On-Demand Pricing

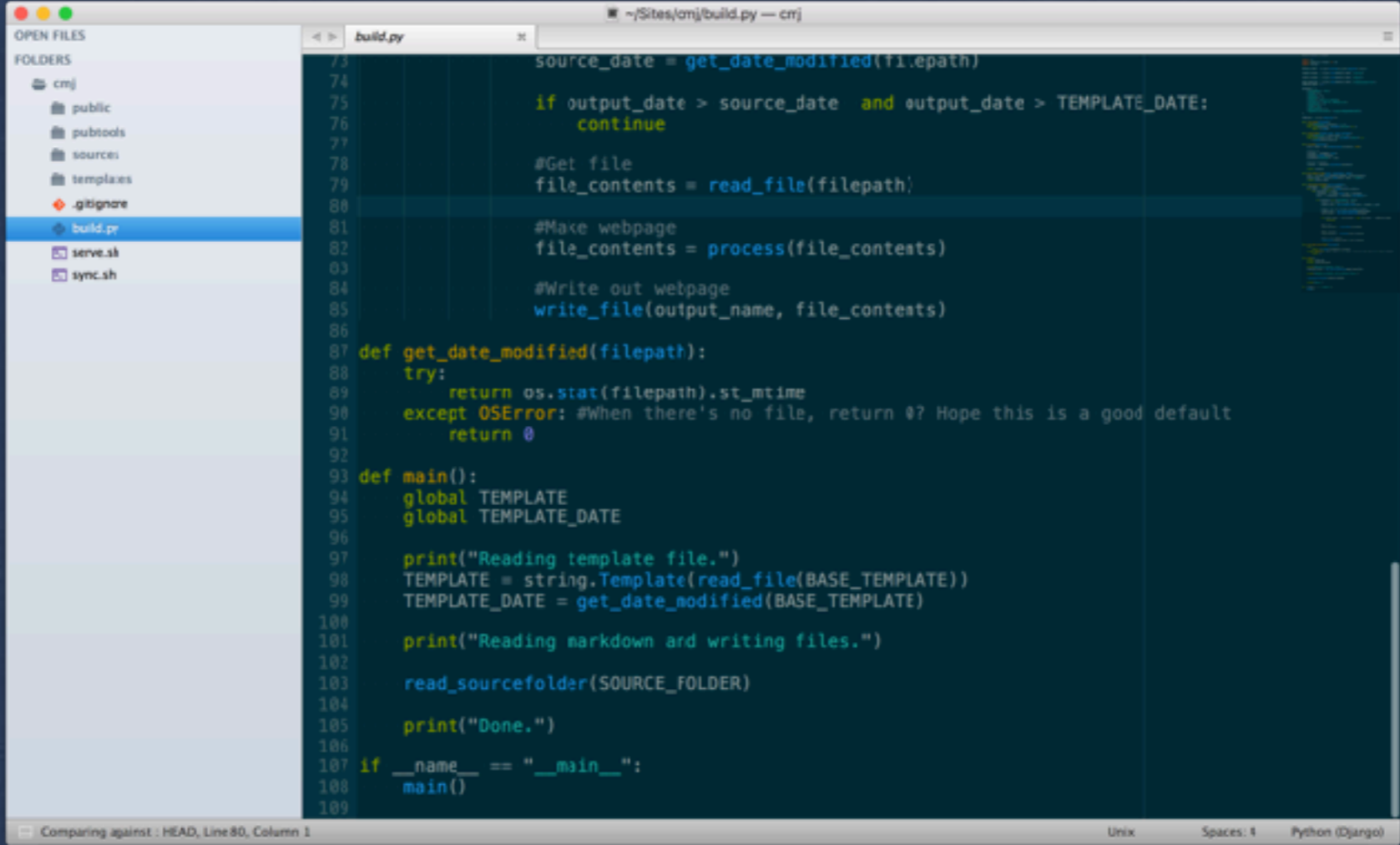
Regional Data Transfer Out to Internet (per GB)

	United States	Canada	Europe	Hong Kong, Philippines, S. Korea, Singapore & Taiwan	Japan
First 10 TB / month	\$0.065	\$0.085	\$0.085	\$0.140	\$0.140
Next 40 TB / month	\$0.060	\$0.080	\$0.080	\$0.135	\$0.135
Next 100 TB / month	\$0.060	\$0.060	\$0.060	\$0.120	\$0.120
Next 350 TB / month	\$0.040	\$0.040	\$0.040	\$0.100	\$0.100
Next 524 TB / month	\$0.030	\$0.030	\$0.030	\$0.060	\$0.080
Next 4 PB / month	\$0.025	\$0.025	\$0.025	\$0.070	\$0.070

Cons

- ✿ *It's static*
- ✿ *Same content for everyone*
- ✿ *Need to use Disqus or similar service for comments*
- ✿ *Intimidating for non-coders*
- ✿ *Can be tricky to collaborate (but try using Github)*

Rolling your own SSG



```
~/Sites/cmj/build.py -- cmj
OPEN FILES
FOLDERS
cmj
  public
  pubtools
  sources
  templates
  .gitignore
  build.py
  serve.sh
  sync.sh

73 source_date = get_date_modified(fi.ephath)
74
75     if output_date > source_date and output_date > TEMPLATE_DATE:
76         continue
77
78     #Get file
79     file_contents = read_file(filepath)
80
81     #Make webpage
82     file_contents = process(file_contents)
83
84     #Write out webpage
85     write_file(output_name, file_contents)
86
87 def get_date_modified(filepath):
88     try:
89         return os.stat(filepath).st_mtime
90     except OSError: #When there's no file, return 0? Hope this is a good default
91         return 0
92
93 def main():
94     global TEMPLATE
95     global TEMPLATE_DATE
96
97     print("Reading template file.")
98     TEMPLATE = string.Template(read_file(BASE_TEMPLATE))
99     TEMPLATE_DATE = get_date_modified(BASE_TEMPLATE)
100
101     print("Reading markdown and writing files.")
102
103     read_sourcefolder(SOURCE_FOLDER)
104
105     print("Done.")
106
107 if __name__ == "__main__":
108     main()
109
```

Comparing against : HEAD, Line 80, Column 1

Unix Spaces: 1 Python (Django)

CARL M. JOHNSON.NET

About

Carl M. Johnson is a philosopher and programmer, currently employed as a senior software engineer at [Ad Hoc](#). In 2012, Carl received a Ph.D. in comparative philosophy for a dissertation entitled "[Watsuji Tetsurō and the Subject of Aesthetics](#)" (pdf) from the [University of Hawai'i Mānoa](#). In 2006, he received a master's degree from the University of Hawaii. From 2004 until 2006, he taught English as a member of the [JET Programme](#) in Toyama Prefecture, Japan at [Fukuoka Senior High School](#) and [Takaoka School for the Hearing Impaired](#). In 2004, he graduated from [Furman University](#) in Greenville, South Carolina with a double major in philosophy and computer science. In 2000, he graduated from high school at the [South Carolina Governor's School for Science and Mathematics](#).



Carl's primary experiences as a professional developer have been in Python with Django, but he also has a strong interest in using [Go](#) to solve everyday programming problems.

Carl's areas of philosophical specialization are Japanese philosophy (especially the Kyoto School),

Rolling your own SSG

Creating a static site with Jekyll





Transform your plain text into static websites and blogs.

Simple

No more databases, comment moderation, or pesky updates to install—just *your content*.

[How Jekyll works →](#)

Static

[Markdown](#) (or [Textile](#)), [Liquid](#), HTML & CSS go in. Static sites come out ready for deployment.

[Jekyll template guide →](#)

Blog-aware

Permalinks, categories, pages, posts, and custom layouts are all first-class citizens here.

[Migrate your blog →](#)

Get up and running *in seconds*.

Quick-start Instructions

```
~ $ gem install jekyll bundler
~ $ jekyll new my-awesome-site
~ $ cd my-awesome-site
~/my-awesome-site $ bundle exec jekyll serve
# => Now browse to http://localhost:4000
```

Creating a Data-Driven Site

- ✿ *Static Site Generators are great at creating blogs, but they can also make general purpose websites*
- ✿ *Items in data folder can drive site-wide content*
- ✿ *Front matter can drive page content*

Live Demo!



Example Site: Voter Guide 2018



★★MARYLAND VOTER GUIDE 2018★★



In 2018 Marylanders will vote in elections for governor, comptroller, attorney general, U.S. Senator, all eight seats in the House of Representatives and all 188 seats in the General Assembly. Local elections for county executives, council members or commissioners, state's attorneys and other offices will also be held throughout the state, with the exception of Baltimore City, where the offices of mayor and City Council are not on the ballot until 2020.

FED & STATE

LOCAL

FEDERAL & STATE RACES

GOVERNOR / LT. GOVERNOR

ATTORNEY GENERAL

REPRESENTATIVE IN CONGRESS

HOUSE OF DELEGATES

COMPTROLLER

U.S. SENATOR

STATE SENATOR

JUDGE OF THE CIRCUIT COURT

Code for the Baltimore Sun's 2018 Election Guide Edit

Add topics

77 commits 3 branches 0 releases 3 contributors

Branch: master New pull request Create new file Upload files Find file Clone or download

Table with commit history: carolinp create subscribe button; add new share image (#6) Latest commit 1fa367d 16 days ago. Includes folders like archetypes, cmd/csv-splitter, content, csv, data, layouts, psd, static and files like .dockerignore, .eslintrc.json, .gitignore, .prettierignore.



The world's fastest framework for building websites

Hugo is one of the most popular open-source static site generators. With its amazing speed and flexibility, Hugo makes building websites fun again.

[Quick Start](#)

Live Demo!



Thank you for listening!

- ✿ @carlmjohnson
- ✿ @baltsundata
- ✿ <https://jekyllrb.com>
- ✿ <https://gohugo.io>
- ✿ <https://github.com/baltimore-sun-data/voter-guide-2018>