

```
library(dplyr)
```

```
r-ladies_global %>%  
  filter(city == 'Chicago')
```



- Please go to the following link to access these slides, and code for this workshop:

**[bit.ly/rladies-blogdown](https://bit.ly/rladies-blogdown)**

# Make a Personal Website with Blogdown in R

Angela Li

September 24, 2019



If you need help at any point,  
raise your hand/sticky note and  
one of us will help you out!

# Learning goals:

- Understand why you'd want to create a site with blogdown
- Set up, customize, and publish your site!
- (if time) Learn what continuous deployment is, and try it out

# Thank you Alison Hill (R-Ladies PDX)!



*A week of blogdown for  
RStudio's summer 2019  
interns.*

- [Home](#) •
- [Pre-work](#) •
- [Schedule](#) •
- [People](#) •
- [Repo](#) •
- [File an issue](#) •
- [Kelly Kapowski Demo](#) •



The 4-day plan:

- 2019/06/10 [Day 01: Out-of-the-box](#)
- 2019/06/11 [Day 02: Personalizing your site](#)
- 2019/06/12 [Day 03: Keeping up with your content](#)
- 2019/06/13 [Day 04: The finishing touches](#)
- 2019/06/13 [Bonus: Good ideas](#) 👍



Link to Summer of Blogdown:  
<https://summer-of-blogdown.netlify.com/>



# Thank you Joyce Cahoon (R-Ladies RTP)!

27  
JUN

Thursday, June 27, 2019

## Blogdown Basics



Hosted by  
Sheila Saia and Joyce Cahoon



### Details

What's the event about?

At this meetup, R-Ladies RTP member Joyce Cahoon will introduce you to blogdown, an R package for making websites in R. By the end of the session, you will have created a blogdown-powered website. To learn more about blogdown you can check out the free online book by Yihui Xie, Amber Thomas, and Alison Presmanes Hill here:  
<https://bookdown.org/yihui/blogdown/>

Link to Joyce's workshop:  
<https://rpubs.com/joycecahoon/blogdown-intro>

# What we're trying to make pt. 1



Hi! I'm Angela. I'm a data scientist, spatial thinker, and community builder.




I'm currently working as the R Spatial Advocate for the [Center for Spatial Data Science](#) at UChicago. Most recently, I did data science for transit at [TransLoc](#) and wrote a spatial econometrics thesis on the Detroit housing market.


In my day to day, I work closely with [Luc Anselin](#), leading [workshops](#) for researchers at our center and building out [spatial analysis resources](#) for applied social science research. I also [speak at conferences](#) about spatial data science and methods.

I founded [R-Ladies Chicago](#), which is the Chicago branch of a global organization whose mission is to promote gender diversity in the R community. We started in July 2017 and have expanded to 800+ members so far, putting on [20+ events](#) for the Chicago R community. Other organizations I'm affiliated with include [Chi Hack Night](#), [Software Carpentry](#), [rOpenSci](#), and [NASA Datanauts](#).

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# What we're trying to make pt. 2

[home](#) [blog](#) [reading](#) 



## Hi, I'm Sushmita!

I'm a data scientist at the [Northwestern Neighborhood and Network Initiative](#) at Northwestern University. I use statistics, network science and machine learning to work on a variety of projects on gun violence and police misconduct in Chicago. As N3's first data science hire, I also work on setting up computing infrastructure and data pipelines for the lab. My primary tools are Python and R, with occasional recourse to SQL.

I'm proud to be a co-organizer at the wonderful [Chicago chapter](#) of R-Ladies. R-Ladies is a global support and advocacy group for women and gender minorities who use R. We now have a presence in 149 cities across the world and over 50,000 members!

I arrived at data science by way of Economics at the Indian Institute of Technology Madras ([IIT-M](#)), policy research at the Institute for Financial Management and Research ([IFMR](#)), and [Computational Social Science](#) at the University of Chicago. I'm easily excited by the application of statistical and computational methods in public health, media and popular culture.

I tweet frivolities [@SushGopalan](#) and post photos of flowers, Hyderabad and Lake Michigan [@sushmitavgopalan](#).

# What we're trying to make pt. 3



RESEARCH

TALKS

TEACHING

CV

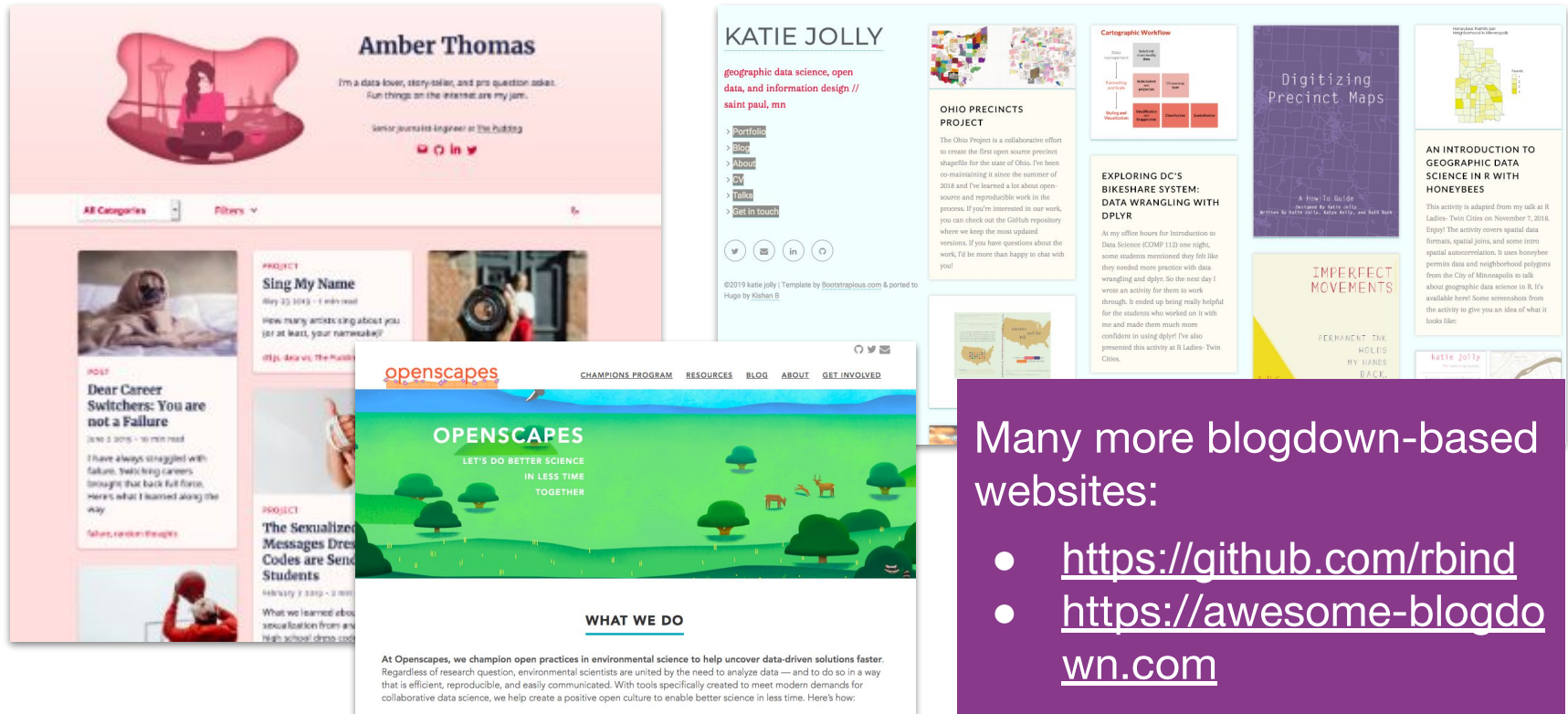
## KATHERINE SIMEON

I am a Ph.D. Candidate in Communication Sciences & Disorders at Northwestern University. I work in the Hearing & Language Lab, led by Dr. Tina Grieco-Calub. My dissertation research investigates how children use their existing phonological and semantic knowledge during spoken language processing and how these strategies differ for children with cochlear implants. I am especially interested in how prior experience with sound and language impacts language processing and lexical activation in children. I get excited about phonetics, pedagogical sciences, eye-tracking, R, and a lot of other things too.

How to pronounce my name: ['kæθju:n 'sɪmiən]



# So many blogdown examples!



The collage features several examples of websites created using R Markdown and blogdown:

- Amber Thomas:** A personal blog with a pink theme, featuring a profile picture, bio, and a list of categories and filters.
- Katie Jolly:** A blog with a light blue theme, featuring a profile picture, bio, and a list of categories and filters.
- Openscapes:** A website with a green theme, featuring a large landscape image and a navigation menu.
- Dear Career Switchers:** A blog post with a pink theme, featuring a large image of a dog and a list of categories and filters.
- The Sexualized Messages Dress Codes are Sending Students:** A blog post with a pink theme, featuring a large image of a person and a list of categories and filters.
- Cartographic Workflow:** A diagram showing the process of creating a map, from data to final output.
- Ohio Precincts Project:** A blog post with a light blue theme, featuring a map of Ohio and a list of categories and filters.
- Exploring DC's Bikeshare System:** A blog post with a light blue theme, featuring a map of DC and a list of categories and filters.
- Digitizing Precinct Maps:** A blog post with a purple theme, featuring a map of a precinct and a list of categories and filters.
- An Introduction to Geographic Data Science in R with Honeybees:** A blog post with a light blue theme, featuring a map of a precinct and a list of categories and filters.
- Imperfect Movements:** A blog post with a yellow theme, featuring a map of a precinct and a list of categories and filters.
- Permanent Tank Holds My Hands Back:** A blog post with a yellow theme, featuring a map of a precinct and a list of categories and filters.

Many more blogdown-based websites:

- <https://github.com/rbind>
- <https://awesome-blogdown.com>





# Why would you want to build a site with the R package blogdown?

Turn to the person next to you and brainstorm!





# Are you set up?

- Do you have R and RStudio installed?
- Do you have a [Github account](#)?
- Have you connected RStudio and Github?
- Have you installed the “blogdown” package in R?
  - `install.packages(“blogdown”)`
- Bonus: Do you have a [Netlify account](#) (use Github account to do this)?



# Surprise: this is secretly also a Git/Github workshop

- We'll try to do the \*hard\* stuff today in-person, so that you're set up for success on your own.
- You can spend **a lot** of time working on your website if you want!



# Surprise: this is secretly also a Git/Github workshop

## Break for Git/Github/RStudio setup:

- Check off all the things on this list in [Ch. 12.1 of Happy Git with R!](#)
- Please put up a **pick sticky note** so we can help you out.
- Likely, you'll get stuck here if you have never done this before: partner up with someone next to you if they know how to do it!



**Warning: the next section won't work unless you have RStudio & Github set up**



# Workflow for blogdown

1. Create repository on Github, and copy (“clone”) to local computer
2. Generate website files with blogdown
3. Modify website
4. Deploy on Netlify

# Workflow for blogdown

1. **Create repository on Github, and copy (“clone”) to local computer**
2. Generate website files with blogdown
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## Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository](#).



Owner

Repository name \*

 angela-li / test-blogdown 

[github.com/new](https://github.com/new)

Great repository names are short and memorable. Need inspiration? [Help](#)

Description (optional)



Public

Anyone can see this repository. You choose who can commit.



Private

You choose who can see and commit to this repository.

Skip this step if you're importing an existing repository.



Initialize this repository with a README

This will let you immediately clone the repository to your computer.

Add .gitignore: None ▾

Add a license: None ▾



Create repository

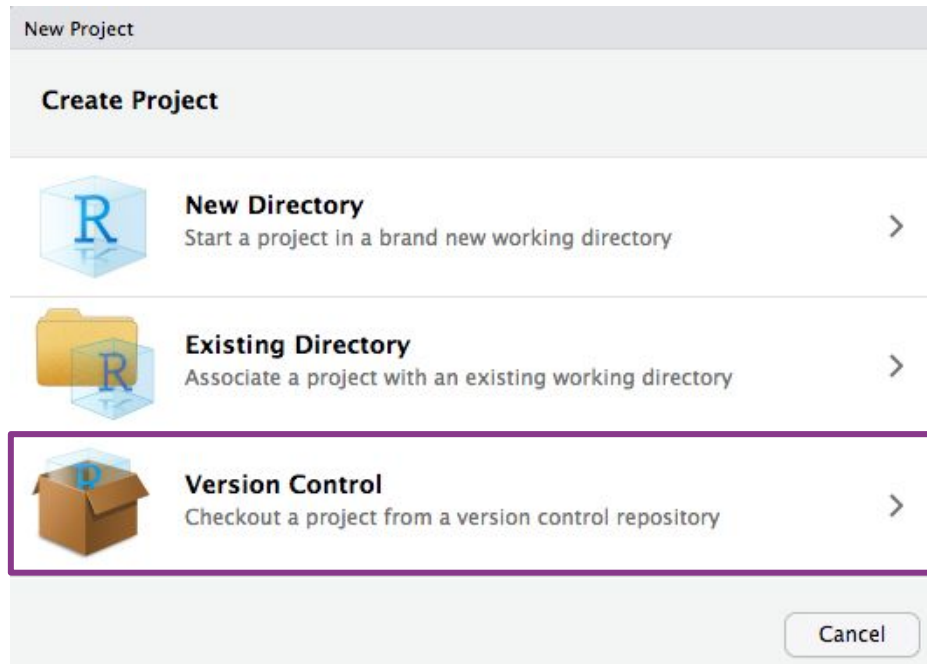
Leave this unchecked,  
because blogdown needs an  
empty repo to work in!





# Create new R project from Github

This is a good general workflow for putting your stuff on Github and version-controlling your analyses!



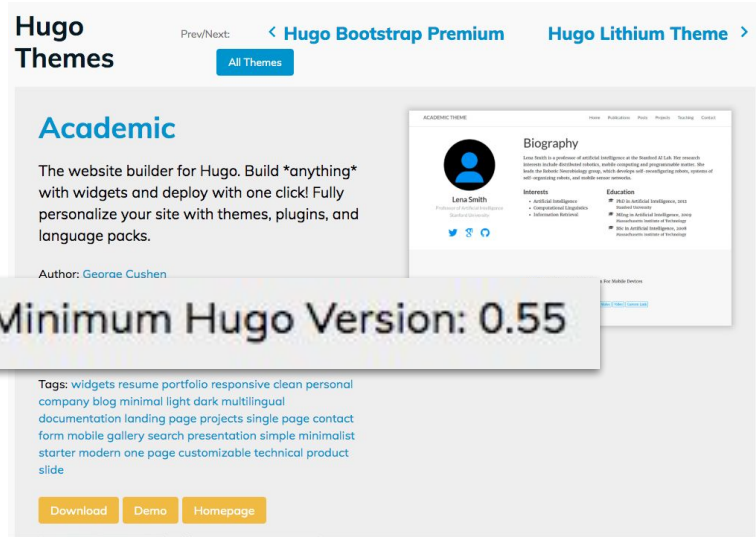
# Double check your Hugo installation is up to date

```
install.packages("blogdown")  
library(blogdown)  
hugo_version()
```

```
> hugo_version()  
[1] '0.49'
```

```
update_hugo()
```

Then restart R!



The screenshot shows the Hugo Themes website. At the top, there are links for "Hugo Bootstrap Premium" and "Hugo Lithium Theme". Below the navigation bar, the "Academic" theme is featured. It includes a description: "The website builder for Hugo. Build \*anything\* with widgets and deploy with one click! Fully personalize your site with themes, plugins, and language packs." and the author "Georae Cushen". A prominent white box with black text overlaying the theme preview states "Minimum Hugo Version: 0.55". Below this, there are tags for the theme: "widgets resume portfolio responsive clean personal company blog minimal light dark multilingual documentation landing page projects single page contact form mobile gallery search presentation simple minimalist starter modern one page customizable technical product slide". At the bottom of the theme preview, there are buttons for "Download", "Demo", and "Homepage".



# Workflow for blogdown

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# Workflow for blogdown

1. Create repository on Github, and copy (“clone”) to local computer
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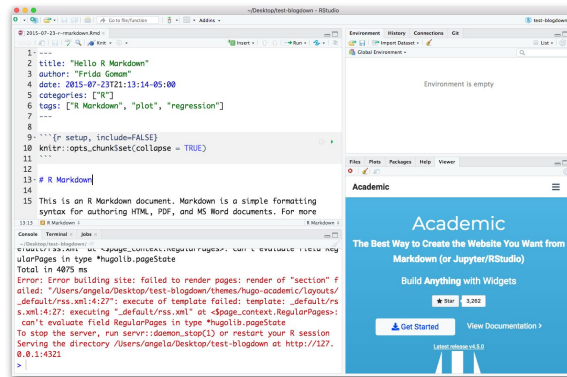




# Run the following code in your new R project to make a website!

```
new_site(theme = "gcushen/hugo-academic",  
        sample = TRUE,  
        theme_example = TRUE,  
        empty_dirs = TRUE,  
        to_yaml = TRUE)
```

This will launch a local version of the site.



# Academic

The Best Way to Create the Website You  
Want from Markdown (or Jupyter/RStudio)

Build **Anything** with Widgets



Star

3,262



Get Started

View Documentation >

[Latest release v4.5.0](#)

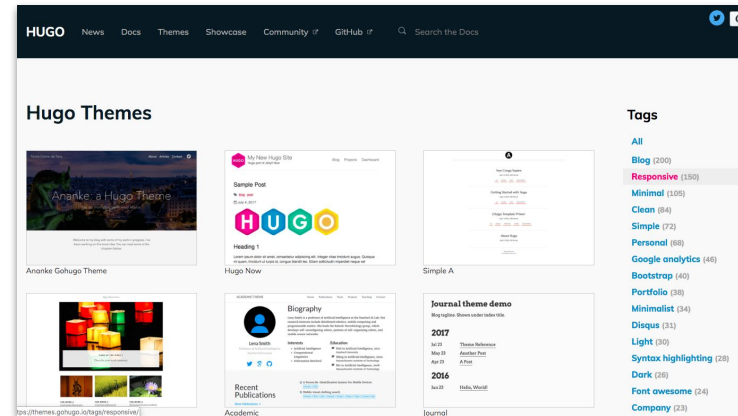


# Want a different theme for your site?

Because blogdown is built on the Hugo static site generator, you can use any theme that works with Hugo! Just go to the Hugo Themes page at <https://themes.gohugo.io/> and check it out.

Just switch the “**theme** = ” argument in `new_site()` to the correct Github repo!

*Warning: some themes are more maintained than others, and personally, I think “Academic” is one of the most up-to-date themes for R workflows!*





# Two other useful commands

`serve_site()` # rebuild site after you make changes

`new_content()` # creates new content

Look at the documentation for these commands.

These are basically the only blogdown commands you need to know, with `new_site()`!





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# There are a lot of sections on your home page!

Go to **content > home > hero.md** and change the TOML header from **active = true** to **active = false**.

What happens to the site when it is served again?

Try it out with **demo.md** too!

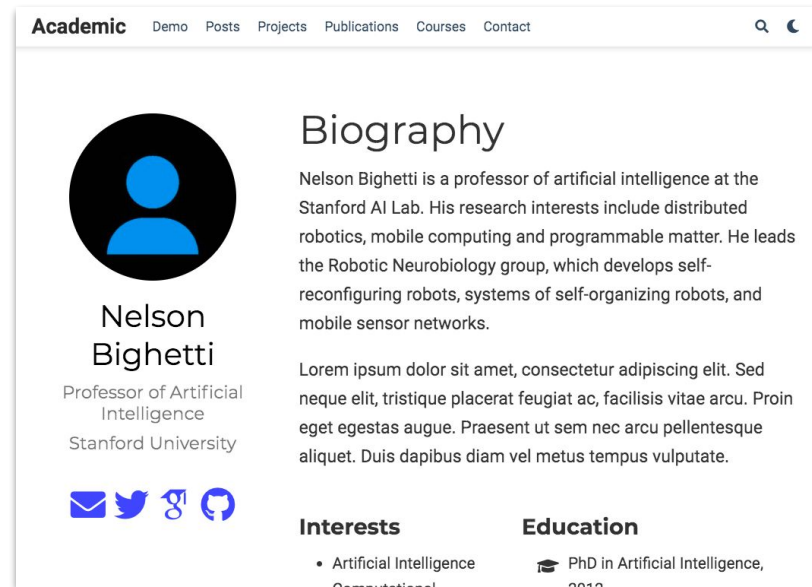
(Q: why not delete these files?)

```
1 +++
2 # Hero widget.
3 widget = "hero" # See
  https://sourcethemes.com/academic/d
4 headless = true # This file repres
5 active = false # Activate this wid
6 weight = 10 # Order that this sect
7
```

# Slightly cleaner, but who is Nelson Bighetti??

Which widget controls this information **about** the page author?

...what's this stuff about user profiles? Should I take a look at **content/authors/**?



# Edit your information

Go to **content > authors > admin** and edit `_index.md`.

If you want, add your own headshot (named the same thing) for **avatar.jpg**.

```
1 ---
2 authors:
3   - admin
4   bio: My research interests include distributed robotics, mobile
      computing and programmable
5     matter.
6   education:
7     courses:|
8     - course: PhD in Artificial Intelligence
9       institution: Stanford University
10      year: 2012
```



# What not to do

Try editing something in the public folder and re-serving your site. What happens to your changes?

# A mental model



# Want to get more in-depth?

Check out Alison Hill's [Summer of Blogdown](#) tutorials [#3](#) and [#4](#) for details on how to really personalize your site! Or Joyce's [shorter R-Ladies workshop](#).

...or if you're like me, just twiddle around until it works.







# Workflow for blogdown

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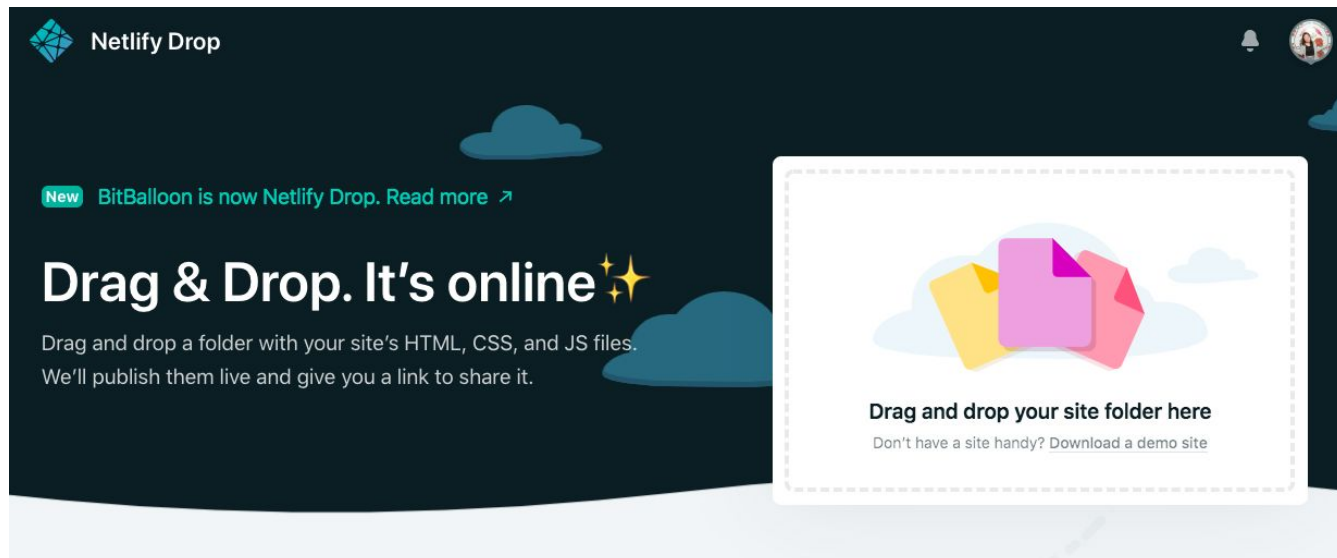
# Workflow for blogdown

1. Create repository on Github, and copy (“clone”) to local computer
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4. **Deploy on Netlify**



# Upload to Netlify

Drag and drop your entire **public/** folder to  
<https://app.netlify.com/drop>





# Workflow for blogdown

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# Bonus content!

1. Create repository on Github, and copy (“clone”) to local computer
2. Generate website files with blogdown
3. Modify website
4. **Deploy on Netlify**
  - a. **Continuous deployment!**





# Continuous deployment

Instead of dragging and dropping your finished website every time, what if every time you updated your site files,

...your website updated automatically?

([Create a Netlify site with continuous deployment!](#))



# Create netlify.toml

In your repository:

```
file.create("netlify.toml")
```

Copy and paste the following:

```
[build]
  publish = "public"
  command = "hugo"

[context.production.environment]
  HUGO_VERSION = "0.58.3"
  HUGO_ENV = "production"
  HUGO_ENABLEGITINFO = "true"

[context.branch-deploy.environment]
  HUGO_VERSION = "0.58.3"
```



# Add a line to .gitignore

```
.Rproj.user  
.Rhistory  
.RData  
.Ruserdata  
public/
```





# Commit and push to Github

angela-li / test-blogdown Private

Unwatch 1 Star 0 Fork 0

Code Issues 0 Pull requests 0 Projects 0 Wiki Security Insights Settings

No description, website, or topics provided. [Edit](#)

[Manage topics](#)

1 commit 1 branch 0 releases 0 contributors

Branch: master New pull request

Create new file Upload files Find File Clone or download

Angela Li Add site files Latest commit a04316e 6 minutes ago

config/_default	Add site files	6 minutes ago
content	Add site files	6 minutes ago
resources/_gen	Add site files	6 minutes ago
static	Add site files	6 minutes ago
themes/hugo-academic	Add site files	6 minutes ago
.gitignore	Add site files	6 minutes ago
config.toml	Add site files	6 minutes ago
index.Rmd	Add site files	6 minutes ago
netlify.toml	Add site files	6 minutes ago
test-blogdown.Rproj	Add site files	6 minutes ago



# Link site to Github

General

**Build & deploy**

Continuous Deployment

Environment

Post processing

Deploy notifications

Domain management

Analytics

Functions

Identity

Forms

## Continuous Deployment

Settings for Continuous Deployment from a Git repository

### Build settings

#### Link your site to a Git repository

Continuous Deployment works by connecting a Git repository to your Netlify site and keeping the two in sync. When you push to Git, we run your build tool of choice on our servers and deploy the result.

[Learn more about Continuous Deployment in the docs](#) ↗

[Link site to Git](#)

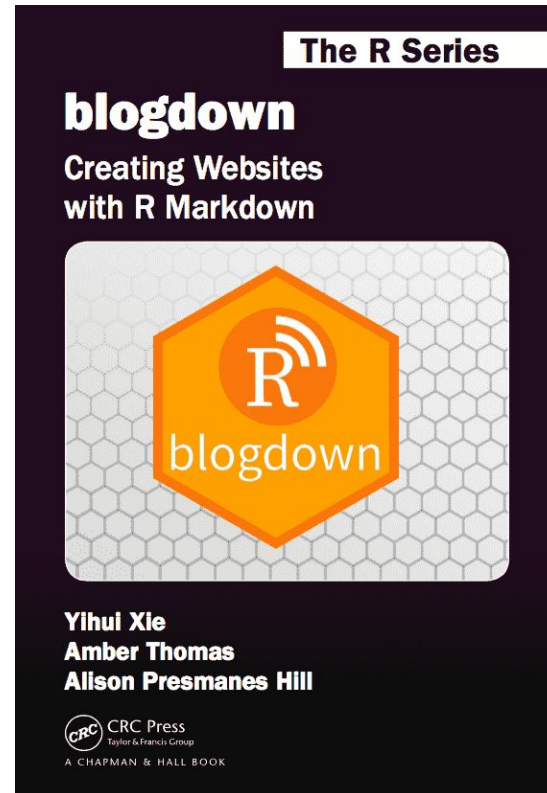


# We did it!

1. Create repository on Github, and copy (“clone”) to local computer
2. Generate website files with blogdown
3. Modify website
4. Deploy on Netlify

# More reading...

- [Blogdown book](#)
- [Summer of Blogdown](#)
- [R-Ladies RTP tutorial](#)



# Share and remix this material!

- This material is released under a CC-BY-4.0 license
- Adapt it and share it with your Meetup, organization, or company!



# Thank you!

- Find me on Twitter at [@CivicAngela](https://twitter.com/CivicAngela)
- Website: [angela-li.github.io](https://angela-li.github.io)
  - (embarrassingly, not yet on continuous deployment...)
- Email: [angela@rladies.org](mailto:angela@rladies.org)



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