```
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

# 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.

- 37.25
- 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 de

Link to Summer of Blogdown: <a href="https://summer-of-blogdown.ne">https://summer-of-blogdown.ne</a> <a href="tlify.com/">tlify.com/</a>



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



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 wi blogdown, an R package for making websites in R. By t you will have created a blogdown-powered website. To

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: <a href="https://rpubs.com/joycecahoo">https://rpubs.com/joycecahoo</a> <a href="https://rpubs.com/joycecahoo">n/blogdown-intro</a>



# 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 <u>Center for Spatial Data Science</u> at UChicago. Most recently, I did data science for transit at <u>TransLoc</u> and wrote a spatial econometrics thesis on the Detroit housing market.

In my day to day, I work closely with <u>Luc Anselin</u>, leading <u>workshops</u> for researchers at our center and building out <u>spatial analysis</u> <u>resources</u> for applied social science research. I also <u>speak at conferences</u> 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.

I'm currently in the process of organizing three events for the Chicago R community, including a <a href="www.women's.package.organizing">women's.package.organizing.



# What we're trying to make pt. 2

home blog reading Q



#### 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



#### **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: [ˈkæθɹɪn ˈsɪmiən]





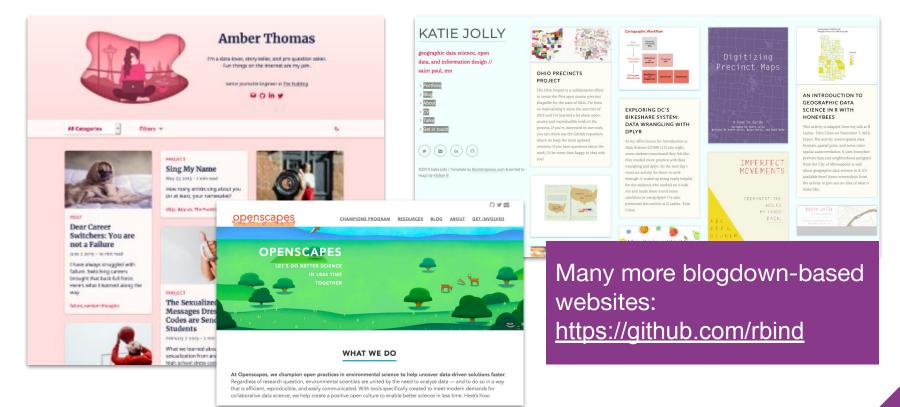








# So many blogdown examples!





# 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 <u>Github account</u>?
- Have you connected RStudio and Github?
- Have you installed the "blogdown" package in R?
  - install.packages("blogdown")
- Bonus: Do you have a <u>Netlify account</u> (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 <a href="Ch. 12.1">Ch. 12.1</a> of Happy Git with <a href="Right">R!</a>
- 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!



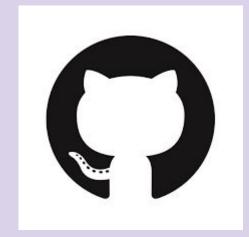
Warning: the next section won't work unless you have RStudio & Github set up



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



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#### Create a new repository



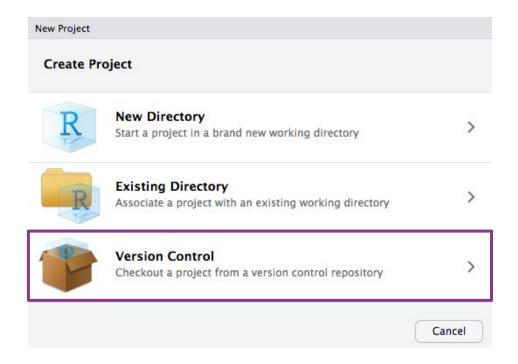
A repository contains all project files, including the revision history. Already have a project repository elsewhere? Import a repository.

Owner	Repository name *
angela-li → Great repository na	test-blogdown  mes are short and memorable. Need inspiration? H  github.com/new
Description (option	al)
Private	see this repository. You choose who can commit. who can see and commit to this repository.
Skip this step if you	u're importing an existing repository.
	pository with a README Immediately clone the repository to your computer.  Leave this unchecked!
Add .gitignore: Non	Add a license: None ▼ (i)
Create reposito	ory



# Create new R project from Github

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



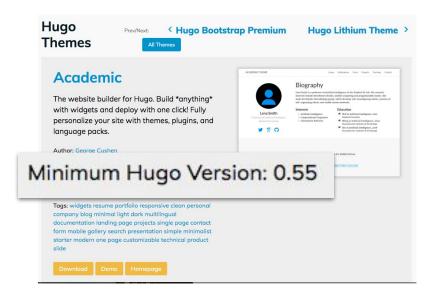


# Double check your Hugo installation is up to date

```
install.packages("blogdown")
library(blogdown)
hugo_version()
[1] '0.49'
```

```
update_hugo(force = TRUE)
```

Then restart R!





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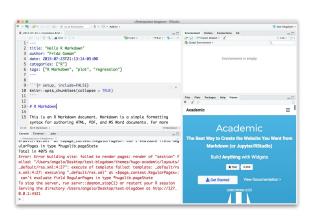
- 1. Create repository on Github, and copy ("clone") to local computer
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# Run the following code in your new R project to make a website!

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





View Documentation >

Latest release v4.5.0





#### 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?)

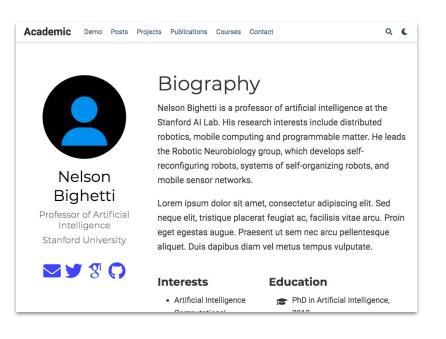
```
1 +++
2 # Hero widget.
3 widget = "hero" # See
   https://sourcethemes.com/academic/d
4 headless = true # This file repres
5 active = false # Activate this wid
6 weight = 10 # Order that this sect
7
```



# 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**.

```
2 authors:
3 - admin
4 bio: My research interests include distributed robotics, mobile
  computing and programmable
    matter.
  education:
    courses:
    - course: PhD in Artificial Intelligence
      institution: Stanford University
```



#### 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 <u>Summer of Blogdown</u> tutorials <u>#3</u> and <u>#4</u> for details on how to really personalize your site! Or Joyce's <u>shorter</u> <u>R-Ladies workshop</u>.

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





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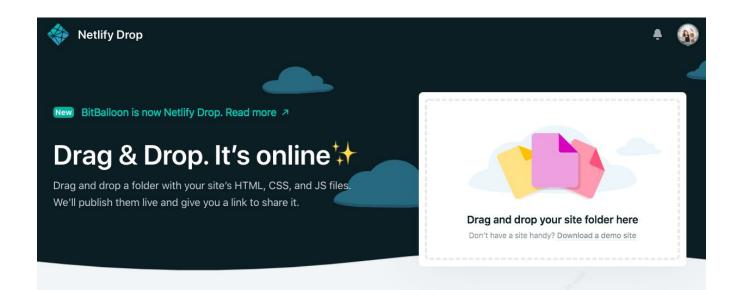
- 1. Create repository on Github, and copy ("clone") to local computer
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# **Upload to Netlify**

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





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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 netlify.toml**

```
In your repository:
file.create("netlify.toml")
Copy and paste the following:
[build]
    publish = "public"
    command = "hugo"
[context.production.environment]
    HUGO VERSION = "0.55.6"
    HUGO ENV = "production"
    HUGO ENABLEGITINFO = "true"
[context.branch-deploy.environment]
    HUGO VERSION = "0.55.6"
```



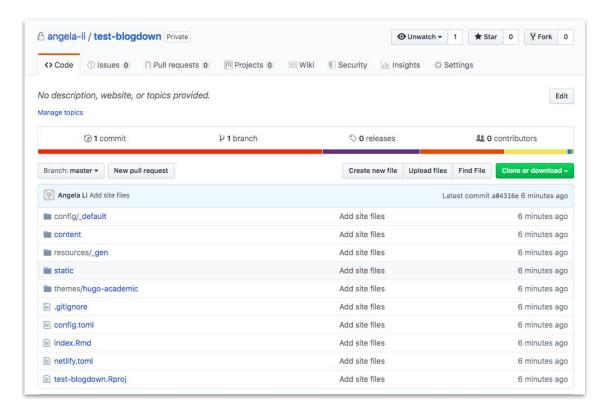
# Add a line to .gitignore

- .Rproj.user
- .Rhistory
- .RData
- .Ruserdata

public/

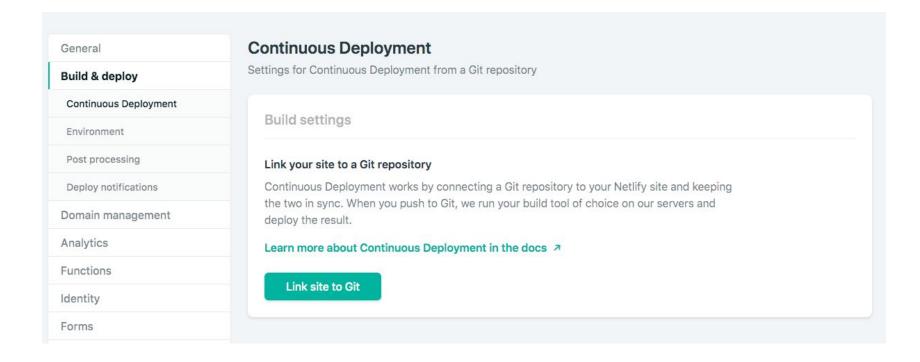


### **Commit and push to Github**





#### Link site to Github





#### We did it!

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# More reading...

- Blogdown book
- Summer of Blogdown
- R-Ladies RTP tutorial





# Thank you!

- Find me on Twitter at <u>@CivicAngela</u>
- Website: <u>angela-li.github.io</u>
  - (embarassingly, not yet on continuous deployment...)
- Email: <u>angela@rladies.org</u>



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I'm currently working as the R Spatial Advocate for the <u>Center for</u>
<u>Spatial Data Science</u> at UChicago. Most recently, I did data science
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I'm currently in the process of organizing three events for the Chicago R community, including a <u>women's package workshop</u>, an <u>unconference</u>, and a <u>1-day conference</u>. I'm always happy to chat about my experiences organizing these type of things (and more), so feel free to <u>schedule a chat</u> to meet in-person or online.