# Using the blogdown Package and Netlify to Build Websites

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### About Me

- E-mail: yeng.m.chang@gmail.com or add me on LinkedIn (https://www.linkedin.com/in/yengmchang/)
- Graduated in 2014 with B.S. Mathematics Statistics at UW-Eau Claire, working on M.S. Statistics at Iowa State University
- Since 2014, I've had positions in life insurance, electronic health records, K-12 education, marketing, and my current position in higher education (at Normandale Community College)
- I've used R for about 4 years
- I'm teaching a class on data querying, cleansing, and reporting in R, SQL, Access, and Excel with some Git and GitHub this Fall (DSCI 2000: Introduction to Data Science) at Normandale... contact me if you're interested

- Sharing information with others
- I was not up for using Blogger, Tumblr, etc... and wanted to build something that I could customize.
- LaTeX and R code integration(!)
- At the same time (yes, in a past life, I had coded a website from scratch using HTML, CSS, JavaScript, and D3.js), I wanted to start with something that looked nice rather than start from raw code.

So what did I do?

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I bookmarked the blogdown text webpage and had it sit there for months.

Blogdown: Creating...

And then one weekend, I decided to spend a good day going through the book.

I won't go through all of the details of how to develop a blog (chapter 1.7 in the text does this pretty well), but I'll cover them at a high level, especially as I tried to develop something that would work for my purposes.

**Step 1**: Figure out what theme you want on https://themes.gohugo.io/ and take note of its GitHub repository.

This might seem like an easy step, but **choose wisely**. Transferring (what may appear to be) the same content from one theme to another can take **hours of work**!

Compare...

GitHub: https://github.com/millerchangym?tab=repositories

XMin Theme: https://vibrant-babbage-4726a0.netlify.com/

Hugo Academic: https://vibrant-lovelace-08e7c4.netlify.com/

- **Step 2**: Create a new R Project using RStudio and type blogdown::new\_site(theme = 'user/repo'), where 'user/repo' comes from the GitHub username/repository\_name part of the link for the desired theme.
- **Step 3**: Make lots of changes, hope that they work, and hope that you can find the file that has what you're looking for. (This is where I spent the bulk of my time.) Let's look at the repositories...

I also find that having examples of blogs with the same theme that have roughly what I'm looking for to be very helpful if they have a GitHub repository.

Make sure you're staging/commmitting everything in your content into Git and pushing into GitHub everything except the public/ folder (not necessary).

**Step 4**: Log in to Netlify (https://app.netlify.com/) using GitHub, set the Hugo version (see section 3.1 of the text), and deploy. This will give you a free domain name under Netlify's domain name.

#### References

■ Xie, Y., Thomas, A., & Allaire, J. (2019). *blogdown: Creating Websites with R Markdown*. Chapman & Hall/CRC. Retrieved from https://bookdown.org/yihui/blogdown/