**Getting Started**

1. Install R from CRAN. Other distributions (Anaconda/Revolutions) can blow up pretty badly. <https://cran.r-project.org/bin/macosx/>
2. Install RStudio. While not a necessity it’s fantastic and it’ll make your life \*so\* much easier <https://www.rstudio.com/products/rstudio/#Desktop>
3. I find the default settings in RStudio to be a little frustrating. You can change these by going to Tools > Global Options
   1. I prefer to have my source and console tabs in the top two panes (Adjust under Global Options > Pane Layout)
   2. I loath white code backgrounds, I’m currently using the Cobalt theme under Appearance. Changing this is optional but I highly recommend a darker theme, it’s much easier on your eyes.
   3. I also kinda think the base font sucks I highly recommend installing fira-code fonts <https://github.com/tonsky/FiraCode>

After downloading install by opening the download folder and:

* + 1. Select all font files
    2. Right click and select Open (alternatively Open With Font Book)
    3. Select "Install Font"
  1. I’d ask your coworkers if you use github or some other vcs so you can get that set up
  2. I also like setting “show indents” and “show margin” (90 characters) to be active in in Global Options > Code > Display. Generally speaking this is just to make sure you aren’t writing lines that are too long or help keep your code lined up.

1. NOTE: This takes a long time to complete and doesn’t need to be done immediately. Run the following snip-it of code to get the majority of libraries installed, some of these libraries you might not use but they have a ton of dependencies and it’ll save you time later if you just install them all now:

install.packages(c('rstanarm', 'tidyverse', 'xlsx', 'ggvis', 'glmnet', 'caret'),

dependencies = TRUE,

keep\_outputs = TRUE)

**Books and Online Resources**

* *Style Guide.* I can’t stress how useful it is to have one, check and see if your team has their own otherwise I’d use this. It’s more important to have a set standard than what the standard is: <http://adv-r.had.co.nz/Style.html>
  + Google has additional guidelines I highly recommend: <https://google.github.io/styleguide/Rguide.html>
* *Learn git*. Use git. Love git… just do it. <https://happygitwithr.com/>
* General *introduction to R* using tidyverse principles: <https://d1b10bmlvqabco.cloudfront.net/attach/ighbo26t3ua52t/igp9099yy4v10/igz7vp4w5su9/OReilly_HandsOn_Programming_with_R_2014.pdf>
* A more thorough treatment of the tidyverse and *data manipulation* (a definite go to, worth considering getting a hard copy): <https://r4ds.had.co.nz/>
* A huge list of useful *R packages*: <https://awesome-r.com/>
* *Cheatsheets!* These are awesome, I use the ones for dplyr and stringr all the time: <https://www.rstudio.com/resources/cheatsheets/>
* *Plotting*. There’s a bit of a learning curve to using ggplot but once you get it you’ll have more control over your static plots and graphics than just about anything else (e.g. Excel/Tableau/base R/etc.): <http://moderngraphics11.pbworks.com/f/ggplot2-Book09hWickham.pdf>
* *Data Viz for Social Sciences in R*. \*Amazing\* book that’ll get you through all sorts of different plots for social science research. <https://socviz.co/>
* *Text Mining*: <https://www.tidytextmining.com/>
* *Geospatial Stuff:* <https://geocompr.robinlovelace.net/>

**Some More Packages and Things:**

* Library of *plot themes for academic journals*: <https://nanx.me/ggsci/articles/ggsci.html>
* *Correlation plots*: <https://cran.r-project.org/web/packages/corrplot/vignettes/corrplot-intro.html>
* Not R specific but a *guide to writing surveys*: <https://psr.iq.harvard.edu/files/psr/files/PSRQuestionnaireTipSheet_0.pdf>
* *Introduction to Statistics with R* (read as basically all stats/machine learning stuff that is incredibly useful l highly recommend using it as a staple for any class after 932): <http://faculty.marshall.usc.edu/gareth-james/ISL/index.html>
* A good primer on *why we use <- and not =* for variable assignment. Mostly stuff you probably won’t care about but good to skim over anyway. And always use <- for variable assignment. <https://www.r-bloggers.com/why-do-we-use-arrow-as-an-assignment-operator/>
* If you’re working with surveys you’ll want to be ok with *count data*… here’s how to work with it in R: <https://cran.r-project.org/web/packages/pscl/vignettes/countreg.pdf>
* *Predictive models* (book): <https://pbiecek.github.io/PM_VEE/index.html>
* *Date formatting* is a pain… nice little reference doc on importing dates and getting them to behave like you want: <https://www.r-bloggers.com/date-formats-in-r/>
* How many arbitrary decisions have you made in your analysis? The answer is probably quite a lot (your model, your variables, removing observations, etc. etc.) this package at least gives you a rough idea. <https://joachim-gassen.github.io/rdfanalysis/articles/analyzing_rdf.html>