Language Resources

**Any Language**

[Data Camp](https://www.datacamp.com/?utm_source=adwords_ppc&utm_campaignid=1565610606&utm_adgroupid=64773273252&utm_device=c&utm_keyword=data%20camp&utm_matchtype=e&utm_network=g&utm_adpostion=1t1&utm_creative=295213453154&utm_targetid=kwd-298095775602&utm_loc_interest_ms=&utm_loc_physical_ms=9032520&gclid=EAIaIQobChMIwKG11fHF3wIVVRh9Ch3RJQhiEAAYASAAEgK59vD_BwE)

* Learn data science online for R, Python, SQL, Spark, Git, and shell. BSA recommends a paid account if you want to work in industry!

**R**

[R for Data Science](https://r4ds.had.co.nz/)

* Beautiful online textbook with each chapter teaching you anything from basics, data visualization (ggplot2 **highly recommend**), project workflows, model building, and more. FREE

[R Cookbook](http://www.bagualu.net/wordpress/wp-content/uploads/2015/10/R_Cookbook.pdf)

* Easy textbook covering the core skills you’ll need with R
  + Data Structures, Transformations, Graphics, Linear Regression and ANOVA, and Time Series Analysis

[Download RStudio](https://www.rstudio.com/products/rstudio/download/)

* How to download RStudio

[Selector Gadget](https://chrome.google.com/webstore/detail/selectorgadget/mhjhnkcfbdhnjickkkdbjoemdmbfginb?hl=en)

* Chrome extension to help with scraping data into R. It’s as easy as clicking on the data frames

**Python**

[Python Data Science Handbook](https://jakevdp.github.io/PythonDataScienceHandbook/)

* Great online textbook to use python for data science. It assumes a basic knowledge of python. Only 5 chapters!
  + Jupyter/IPython, NumPy, Data Manipulation w/Pandas, Matplotlib, and Machine Learning

[The Python Tutorial](https://docs.python.org/3/tutorial/)

* Core Python tutorial. Somewhat lengthy but each topic is explained very well to give a solid foundation. Everything you need to know about Python.

[Install Jupyter](http://jupyter.readthedocs.io/en/latest/install.html)

* How to install Jupyter, and get your Jupyter Notebook started.

**SQL**

[SQL Language Introduction W3 Schools](https://www.w3schools.com/sql/sql_intro.asp)

* Short < 2hr course on SQL, learning its syntax, grabbing data, creating data tables, primary/foreign key practice.

**Excel**

[Excel Data Analysis for Dummies](http://excelpro.ir/wp-content/uploads/2015/12/Excel-Data-Analysis-for-Dummies.pdf)

* Easy introduction to using Excel. Covers:
  + Excel Tables, grabbing data, cleaning, PivotTables/Charts, Statistics Funs, Modeling, and Visualizations