

Data Visualization

Edward Tufte: One-day course on Presenting Data and Information. Bonus - participants receive copies of all four of his books. The books are practical and useful; however, they also look super smart on your bookshelf or coffee table. The fee for the one-day course is \$380 per person. Groups of 10 or more receive a 20% discount. Full-time teaching faculty, students, and, postdocs receive a discount as well. Just want the books? You can order them individually or order all four [here](#).

Tableau: The software costs \$999 for a Personal version. Professional version starts at \$1,999. No complex coding is required to use Tableau, which makes it great for beginners trying to escape the shackles of Excel and Powerpoint! Tableau.com offers online [free training videos](#), [live online training](#), and in [classroom training](#).

Data Visualization Programming

JavaScript

Processing.org: You can download Processing [here](#) for free. Processing is a data visualization and automation tool that requires programming and leverages an extensive JavaScript library. Good news! Processing.org is all open source, which means you can easily find free and/or cheap [books](#), [tutorials](#), [code](#), [online videos](#) and [cool data visualizations](#). Processing.org courses are also available on [Lynda.com](#)

D3: Like Processing, D3 is also a JavaScript library that lets you visualize and automated data using HTML, SVG, and CSS. It is open source with a [GitHub repository](#) – including [examples](#), [tutorials](#), and [gallery](#).

SQL

Official Microsoft SQL Certification Training: Click the hyperlink to see the recommended courses for certification. You can also find an Official Microsoft Training Provider near you. Note that some courses and exams are only offered with an in-classroom option. The cost can vary depending on length and format (Intensive Boot Camp vs. weekly class) but it will run you around \$6,000 for an intensive 9-day Boot Camp style program.

Joes2Pros: I've used their [books](#), [courses](#), and [content](#) to help my folks with strong stats skills learn SQL and general Database structure for several years now. The series of five books are available from [Amazon.com](#). You can get the Kindle version for \$9.99 per book or pay around \$50 for all five books. Paperback is available, but will cost you twice as much: \$19.99 per book or about \$100 for all five. I personally prefer the Kindle version of the book - it is searchable and a great desktop reference for SQL users of all skill levels.

SQL Cheat Sheet: Laminated 4-page reference card you can keep handy on your desk for the bargain price of \$3.49.

[Codecademy](#): Offers all kinds of free programming courses (including python). SQL programming comes in three flavors: [Learn SQL](#), [SQL Table Transformation](#), and, [SQL Analyzing Business Metrics](#). Note that you can upgrade your free subscription to \$19.99 a month and get access to all Codecademy extended content.

[Coursera](#)

Python

[Violent Python](#): The Kindle version is available for \$24.28, and the paperback costs \$30.30.

[RealPython](#): Offers three distinct python courses. Exercises, sample files, assignments, and videos are included with your \$60 access fee.

[Codecademy](#): The Python course provided with the \$19.99 a month subscription fee includes 8 projects, 9 quizzes, and final project. Perfect for a beginner.

Local Atlanta Resources

[Emory Continuing Education](#):

- [Accelerated Training in Big Data](#)
- [Accelerated Training in Business Intelligence](#)
- [Python](#)
- [SQL](#)

[Georgia Tech Continuing Education](#)

- [Georgia Tech Data Science & Analytics Boot Camp](#)
- [Computing for Data Analysis](#)
- [Introduction to Analytics Modeling](#)

[Kennesaw State Continuing Education](#)

- [Online Certificate in Applied Statistics using SAS](#)
- [Online Certificate in Applied Statistics using R](#)
- [Online Certificate in Applied Data Science using Python](#)

Websites

[Kahn Academy](#)

[Coursera](#)

[flowingdata.com](#): Offers both free and subscription based content. I personally pay the tiny fee of \$59 a year for access to tutorials, guides, and various courses like visualizations in R programming.

[Kaggle.com](#): Free community of data scientists, statisticians, and analysts. Kaggle offers competitions and really cool, downloadable datasets. Members have the ability to run code in the cloud, get feedback from the community, and share modeling projects. Just to underscore the geeky awesomeness of this community: I found my election data from [FiveThirtyEight \(Nate Silver\)](#) here. I've also used the [Game of Thrones](#) data for survival analysis - because Winter is Coming and we ALL want to know who will die next.

[FiveThirtyEight](#): Nate Silver. 'nough said.

[Data Science Central](#): Mix of content and community.

[Probably Overthinking It](#): Blog by Allen Downey. He's written a book or two (understatement). Professor of Computer Science at Olin College.

[rpsychologist.com](#): Swedish, clinical psychology PhD Student, Kristoffer Magnusson. Pretty darn smart guy – background in web dev – does cool D3.js visualizations and has a decent sense of humor.

[informationisbeautiful.net](#): Blog of David McCandless. British author, information designer, and data journalist.

[visualisingdata.com](#): Andy Kirks. UK based designer with a creative eye for data storytelling.

Authors

[Thomas Davenport](#): This guy (literally) wrote the book on *Big Data at Work, Competing on Analytics, Analytics at Work*, and *Keeping Up with the Quants*. He also launched the [IIA](#) (International Institute for Analytics) which has great content, webinars, thought pieces, and newsletters.

[Dan Ariely](#): Professor of Psychology and Behavioral Economics at Duke University. *Predictably Irrational*, *The Upside of Irrationality*, *Payoff: The Hidden Logic That Shapes Our Motivations*.

Tyler Vigen: Runs a blog on [Tylervigen.com](#) otherwise known as SpuriousCorrelations. He's now turned his blog into a little book, [Spurious Correlations](#).

[Malcolm Gladwell](#): This guy wears funky, miss-matched socks. He's also brilliant and has big hair that resembles my own. Just incase you missed one of his books - *Blink*, *Outliers*, *The Tipping Point*, *David and Goliath*, and *What the Dog Saw*.

[Avinash Dixit](#): Game Theory and Economics professor at Princeton. His book, *Games of Strategy*, was my textbook in my MBA Introduction to Game Theory class. I also add that he has published more academic papers in the field of Game Theory that I can possibly list here - just Google Dixit if you want to uncover more. *The Art of Strategy*, *Thinking*

Strategically, Optimization in Economic Theory, The Art of Smooth Pasting, Games of Strategy, The Theory of Equilibrium Growth.

Books and Textbooks

SAS Essentials: Mastering SAS for Data Analytics

Making Hard Decisions

The Statistical Sleuth

Database System Concepts

Cryptography and Network Security

Mastering the New Media Landscape

Naked Statistics: Stripping the Dread from the Data

An Introduction to Statistical Learning: with Applications in R

Python Machine Learning

Fundamentals of Machine Learning for Predictive Data Analytics: Algorithms, Worked Examples, and Case Studies

Combinatorics: A Guided Tour