

Module 1

Links:

- <https://blog.linkedin.com/2017/december/7/the-fastest-growing-jobs-in-the-u-s-based-on-linkedin-data>
 - Top 10 growing jobs in 2017: Machine Learning Engineer is first, Data Scientist second, Big Data Developer 5th, Director of DS 8th
- <https://hbr.org/2012/10/data-scientist-the-sexiest-job-of-the-21st-century>
 - Famous Harvard Business Review, Data Scientist: The Sexiest Job of the 21st Century published Oct 2012
- <https://medium.freecodecamp.org/aspiring-data-scientist-master-these-fundamentals-be7c54350868>
 - Good overview of a few fundamentals DS should master
- https://en.wikipedia.org/wiki/List_of_analyses_of_categorical_data
 - Different types of analyses available to be done on categorical data
- <http://www.unofficialgoogledatascience.com/2016/10/practical-advice-for-analysis-of-large.html>
 - Practical advice on analyzing large datasets
- <http://students.brown.edu/seeing-theory/index.html>
 - Visual introduction to probability and statistics

Books:

- **Data Smart: Using Data Science to Transform Information into Insight** by John W. Foreman ([link](#))
 - Good book to start working on your data intelligence. How to approach data analysis so it provides value. Some basic algorithms explained and implemented in... Excel
- **Statistics Done Wrong: The Woefully Complete Guide** by Alex Reinhart ([link](#), [free version](#))
 - Great resource to better understand statistics and how easy it is to misinterpret them

Programming basics

- **Automate the Boring Stuff with Python** by Al Sweigart ([book](#), [free version](#))
 - Good introduction to programming. In Automate the Boring Stuff with Python, you'll learn how to use Python to write programs that do in minutes what would take you hours to do by hand—no prior programming experience required.
- **How to Think Like a Computer Scientist** by Peter Wentworth, Jeffrey Elkner, Allen B. Downey, and Chris Meyers (<http://openbookproject.net/thinkcs/python/english3e/>)
 - Book designed to teach Python from scratch. Covers both simpler and more advanced concepts.

Module 2

Links:

- <https://www.machinelearningplus.com/101-numpy-exercises-python/>
- <https://activewizards.com/blog/a-comparative-analysis-of-top-6-bi-and-data-visualization-tools-in-2018/>
- <https://realpython.com/blog/python/python-matplotlib-guide/>

Books:

- <http://serialmentor.com/dataviz/>
 - An online preview of the book “Fundamentals of Data Visualization” to be published with O’Reilly Media, Inc. Completed chapters will be posted here as they become available. (source code: <https://github.com/clauswilke/dataviz>)

Module 3

- https://github.com/zotroneis/machine_learning_basics
 - Examples of basic algorithms in python with some theory explained

Module 4

- <https://tech.instacart.com/how-to-build-a-deep-learning-model-in-15-minutes-a3684c6f71e>

Module 5