



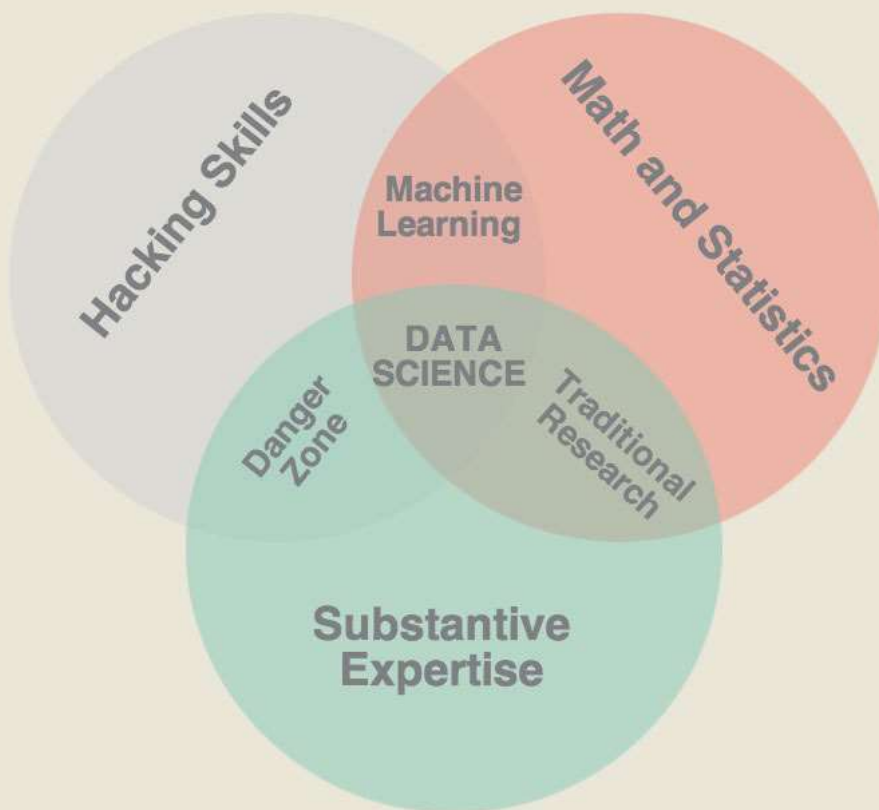
Become a



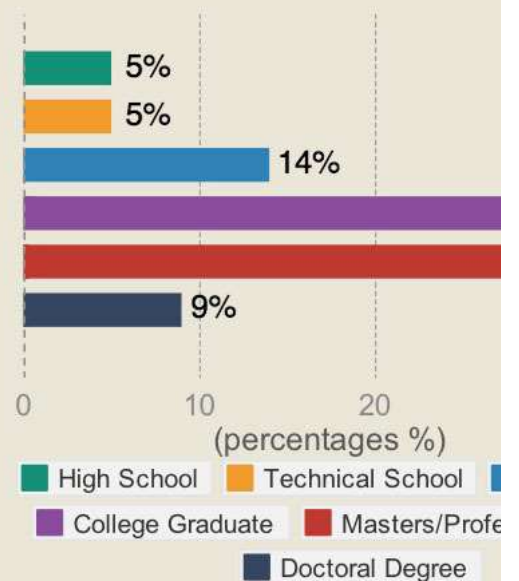
Data Scientist

in 8 easy steps

What's a data scientist?



Typical Background



A data scientist is someone who is better at statistics than any software engineer and better at software engineering than any statistician.

1 Get good at stats, math and machine learning

2 Learn to code

Math



- > Math Track of Khan Academy
- > Linear Algebra by MIT OpenCourseware



Stats



- > Intro to Statistics by Udacity
- > OpenIntro Statistics



ML



- > Machine Learning by Andrew NG (Stanford Online)
- > Practical Machine Learning by John Hopkins (Coursera)

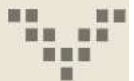


Computer Science Fundamentals

- > CS50x on edX



Grasp end-to-end development
The things you build will be integrated into other systems



Choose a first language

- > Open Source: R, Python
- > Commercial: SAS, etc.



Learn Interactively

- > R: DataCamp, tryR
- > Python: Codecademy, Google Class

3 Understand databases

As a data scientist student, you will often work with data in text files. However, once you enter the industry, a database is almost always used to store data. It's going to be stored in MySQL, Postgres, MongoDB, Cassandra, etc.



4 Master data munging, visualization and reporting

☐ Data cleaning and munging



WHAT

Data munging is the process of converting one "raw" form into another format for more convenient consumption



TOOL

- > Getting and Cleaning Data by John H. Fox

DataWrangler





Learn more on databases via:



datamonkey.pro



☐ Data visualization



WHAT

Data visualization involves the creation and study of the visual representation of data.



TOOL

ggvis



☐ Reporting



WHAT

In every data analysis, putting the analysis and the results into a comprehensible report is the final hurdle to take.



TOOL



5 Level up with Big Data

When you start operating with data at the scale of the web, the fundamental approach analysis must change. Most data scientists are working on problems that can't be run on machines. They have large data sets that require distributed processing.

Hadoop is an open-source software framework for storage and large-scale processing of data-sets on clusters of commodity hardware.



MapReduce



MapReduce is this programming paradigm that allows for massive scalability across the servers in a Hadoop cluster.

Apache Spark is a fast-running analysis system that provides real-time processing functionality on Hadoop.

Spark

6 Get experience, practice and meet fellow data scientists

Practice makes perfect ...



Join in
competitions



Meet fellow data
scientists



Have a pet
project



Dev
in

7 Internship, bootcamp or get a job

The best way to find out whether you are a true data scientist or not is to take the bull by the horns and to enter the real-life jungle of data-analysis and science with your freshly acquired skill set.

Internship



BEGINNER

Bootcamp



INTERMEDIATE

Job



ADVANCED

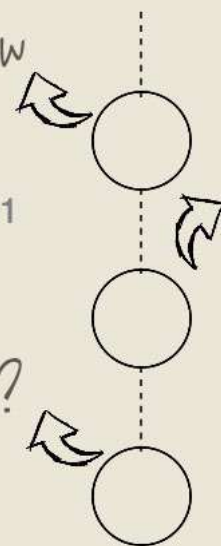
amazon.com



8 Follow and engage with the community

Sites to follow

- > DataTau
- > Kdnuggets
- > fivethirtyeight
- > datascience101
- > r-bloggers



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Need Data?



DataCamp

Learn data analysis for free,
interactively

@DataCamp_com