Welcome to Data Science!
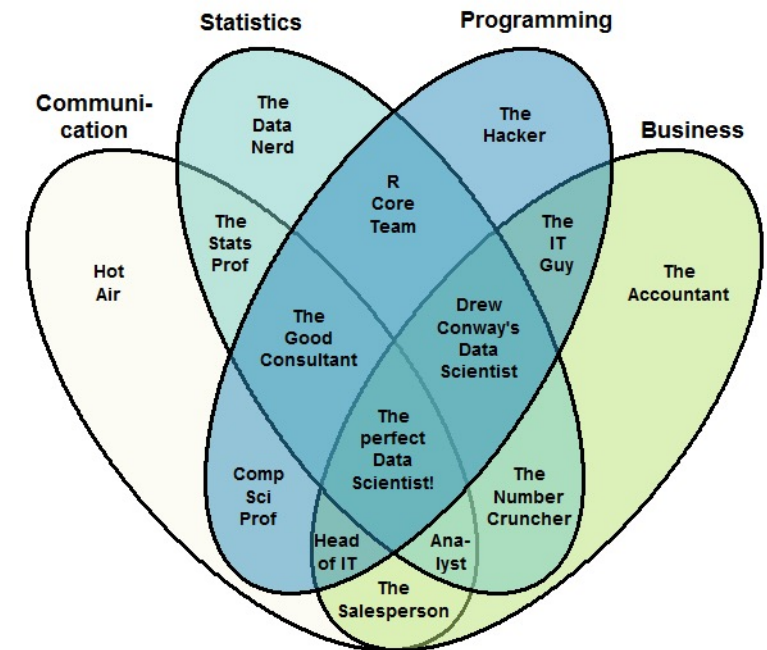
What is Data Science?

- Combines statistics, programming, information science, and business acumen

- Make data actionable!

The Data Scientist Venn Diagram
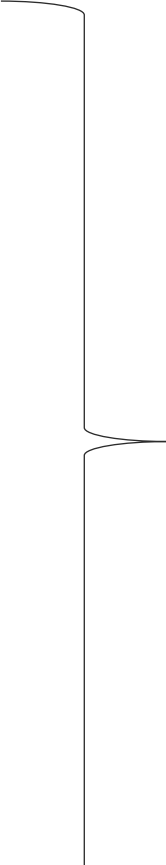
Why is Data Science the Top Job?

- EVERYONE needs data scientists! Not just tech companies

- Not enough data scientists to go around!

- Organizations face enormous challenges organizing data

In what Industries are Data Scientists Working?

- Biotechnology
- Energy
- Transportation
- Telecommunications
- Social Media
- Finance
- Insurance
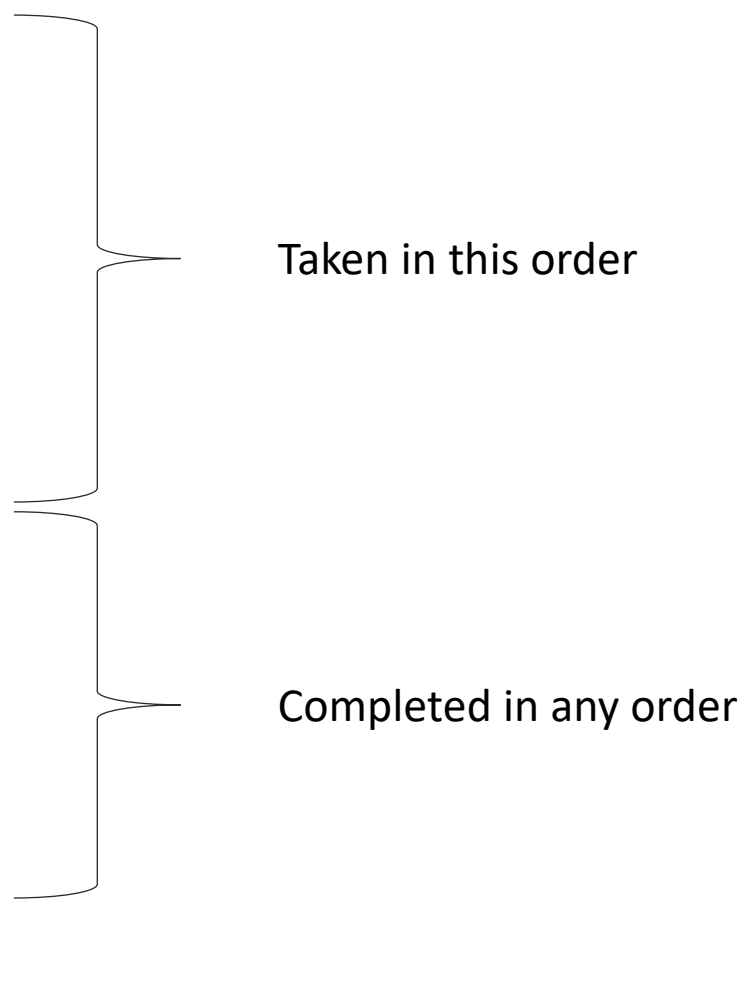- Healthcare and pharmaceuticals
- Internet

About this Course

Your Journey through This Course

Basic Statistics
Statistical Programming in R
Programming Foundations in Python
Databases
Data Wrangling and Visualization
Intermediate Statistics
Machine Learning and Modeling
Intro to Big Data
Metrics and Data Processing, Project Management
Group Project

All are 3 week modules

6 week finale

Your Journey through This Course
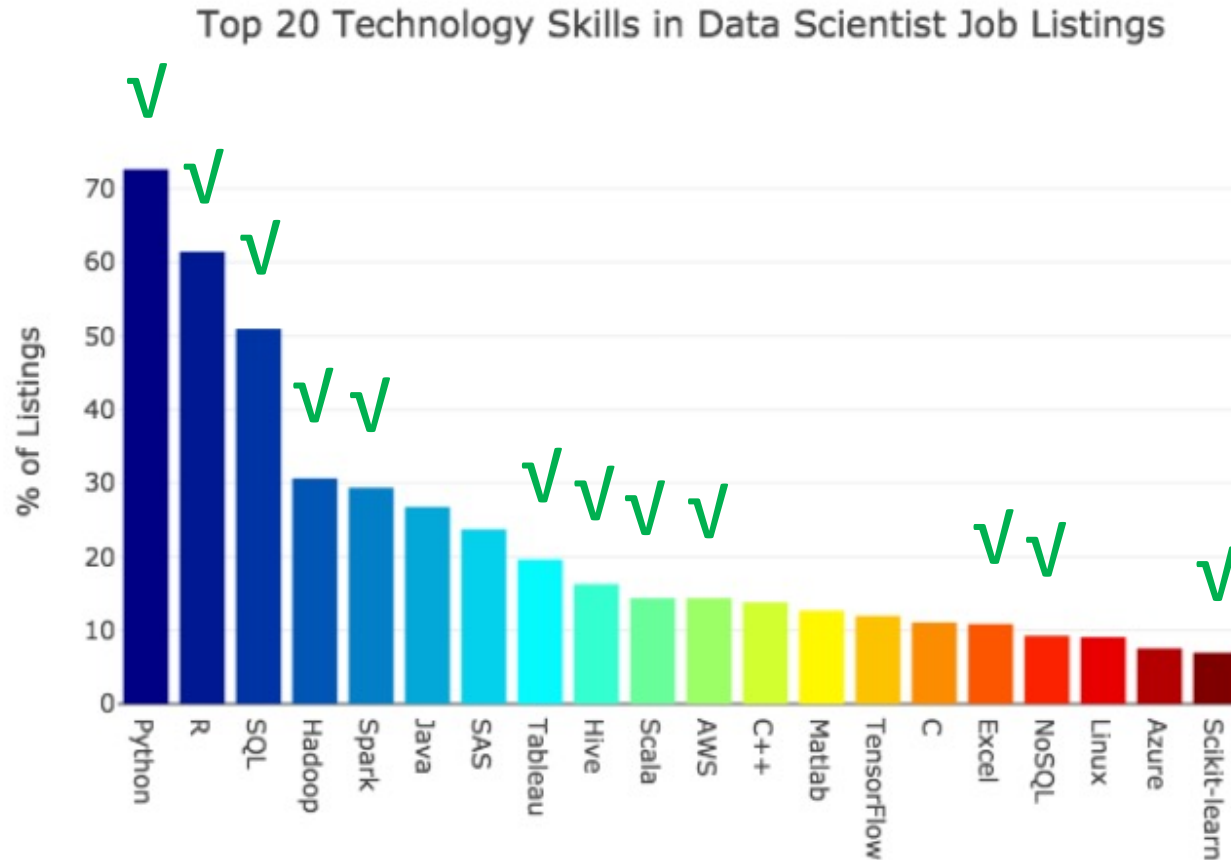
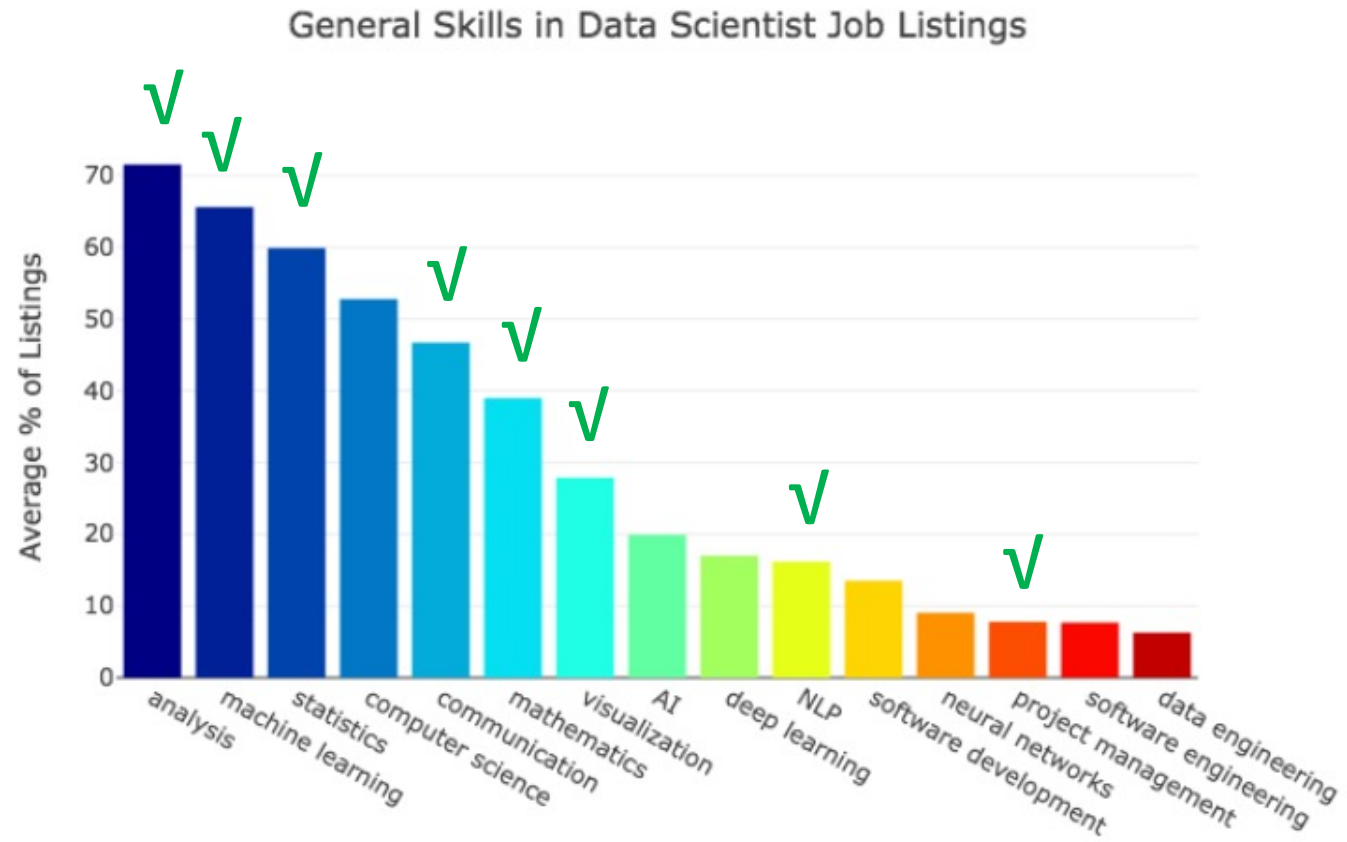| |
|---|
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Taken in this order

Completed in any order

What Major Software Programs will you learn?

Top 20 Technology Skills in Data Scientist Job Listings

What Data Science Skills will you learn?

General Skills in Data Scientist Job Listings

What can I do when I graduate?

Experience Level	Entry	Mid	High
Job titles	Data Specialist	• Junior Data Scientist • Data Analyst • Market Analyst • Business Analyst • Program Evaluator • Associate Researcher • Scientist • Statistician • Intelligence Analyst	• Project Manager • Data Scientist • Senior Data Scientist • Data Engineer • Modeler • Researcher • Senior Scientist • Biostatistician
Skills needed	• MS Excel • MS Access	• Statistical Programming in R and Python, SAS, SPSS, MiniTab, or MLAB • Database manipulation through SQL • Data visualization in Tableau and other stats programs	• Programming in Python • Machine learning, deep learning • AWS, Spark, Hadoop, Jira • Project management in Agile, Waterfall • Publication of findings
Applications	• Data entry • Basic analysis • Descriptive statistics	• Analysis for businesses • Scientific, and research applications	• Analysis for large and/or complex businesses • Scientific, and research applications

Questions?