Typical job duties for data scientists

There's not a definitive job description when it comes to a data scientist role. But here are a few things you'll likely be doing:

Contents

- Vision ................................................................. 4
- Mission ............................................................... 4
- 1. Collection & Formatting .................................. 5
- 2. Technology Solutions ...................................... 6
- 3. Programming .................................................. 7
- 4. Statistics ........................................................... 8
- 5. Analytical Techniques ...................................... 9
- 6. Communication & Collaboration .................... 10
- 7. Patterns & Trends ............................................ 11
- Administrative Information ............................... 11
Data Scientists:
Data scientists are a new breed of analytical data expert who have the technical skills to solve complex problems—and the curiosity to explore what problems need to be solved. They’re part mathematician, part computer scientist and part trend-spotter. And, because they straddle both the business and IT worlds, they’re highly sought-after and well-paid. Who wouldn’t want to be one? They’re also a sign of the times. Data scientists weren’t on many radars a decade ago, but their sudden popularity reflects how businesses now think about big data. That unwieldy mass of unstructured information can no longer be ignored and forgotten. It’s a virtual gold mine that helps boost revenue—as long as there’s someone who digs in and unearths business insights that no one thought to look for before. Enter the data scientist.

Statisticians:
Where did they come from? Many data scientists began their careers as statisticians or data analysts. But as big data (and big data storage and processing technologies such as Hadoop) began to grow and evolve, those roles evolved as well. Data is no longer just an afterthought for IT to handle. It’s key information that requires analysis, creative curiosity and a knack for translating high-tech ideas into new ways to turn a profit.

Data Analysts

Universities:
The data scientist role also has academic origins. A few years ago, universities began to recognize that employers wanted people who were programmers and team players.

Institute for Advanced Analytics:
Professors tweaked their classes to accommodate this—and some programs, such as the Institute for Advanced Analytics at North Carolina State University, prepared to churn out the next generation of data scientists. There are now more than 60 similar programs in universities around the country.

Students:
If you’re a student—Choosing a university that offers a data science degree—or at least one offering classes in data science and analytics—is an important first step. Oklahoma State University, University of Alabama, Kennesaw State University, Southern Methodist University, North Carolina State University and Texas A&M are all examples of schools with data science programs.

Oklahoma State University
University of Alabama
Kennesaw State University
Southern Methodist University
North Carolina State University
Texas A&M

Professionals:
If you’re a professional who wants to shift careers—While most data scientists have backgrounds as data analysts or statisticians, others come from non-technical fields such as business or economics. How can professionals from such diverse backgrounds end up in the same field? It’s important to look at what they have in common: a knack for solving problems, the ability to communicate well and an insatiable curiosity about how things work. Learn how the SAS Academy for Data Science gives you the tools to become a certified data scientist.

SAS Academy for Data Science
Businesses:
When is a business ready to hire a data scientist? Before you accept a data scientist position, there are a few things about the organization you should evaluate:

- Does it deal with large amounts of data and have complex issues that need to be solved? Organizations that truly need data scientists have two things in common: They manage massive amounts of data, and they face weighty issues on a day-to-day basis. They’re typically in industries such as finance, government and pharma.
- Does it value data? A company’s culture has an impact on whether it should hire a data scientist. Does it have an environment that supports analytics? Does it have executive buy-in? If not, investing in a data scientist would be money down the drain.
- Is it ready to change? As a data scientist, you expect to be taken seriously, and part of that entails seeing your work come to fruition. You devote your time to finding ways your business can better function. In response, a business needs to be ready— and willing — to follow through with the results of your findings.

Hiring a data scientist to guide business decisions based on data can be a leap of faith for some organizations. Make sure the business you might be working for has the right mindset— and is ready to make some changes.

Vision
Businesses use data to solve problems

Mission
To outline typical job duties for data scientists
1. Collection & Formatting

Collect large amounts of unruly data and transforming it into a more usable format.
2. Technology Solutions

*Solve business-related problems using data-driven techniques.*
3. Programming

Work with a variety of programming languages, including SAS, R and Python.
4. Statistics

Gain a solid grasp of statistics, including statistical tests and distributions.
5. Analytical Techniques

*Stay on top of analytical techniques such as machine learning, deep learning and text analytics.*
6. Communication & Collaboration

Communicate and collaborate with both IT and business.
7. Patterns & Trends

Look for order and patterns in data, as well as spotting trends that can help a business’s bottom line.

Stakeholder(s)
Businesses

Administrative Information
Start Date:
End Date:
Publication Date: 2020-06-09
Submitter:
Given Name: Owen
Surname: Ambur
Email: Owen.Ambur@verizon.net
Phone: