How to prepare for a career as a data specialist

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Mukesh Ambani once said, "In this new world, data is the new oil. And data is the new wealth." His words articulate the importance of data and data science. Today our every interaction with technology revolves around data; for example, our Facebook feeds, purchases on Amazon are influenced by data. Data Science helps companies recommend products that consumers need.

As per a Forbes report, the job of a Data Scientist has been the best occupation in the US for the last three years. A US Bureau of Labor Statistics report suggests that by 2026 the need for data scientists will create 11.5 million jobs. The demand for data scientists is growing in every sector, including banking and finance, e-commerce, education, and IT.

Data scientists are helping banks upsell and cross-sell financial products to customers. They are also assisting banks in attracting and retaining customers by helping them understand customers' needs. In technology savvy markets like China, data scientists are helping financial institutes in evaluating the creditworthiness of loan applicants in seconds.

The role played by data scientists is crucial because unprecedented amounts of data are being generated daily. Most of this data has value, yet organisations have to find ways to capture this value to make informed decisions.

Data scientists help companies with this. They create the algorithms that tell the software what patterns to look for in terabytes of raw data. So how can someone prepare for a job as a data scientist?

If one wants to become a data scientist, he or she must master at least one programming language (although knowing more than one is a plus). Now, let's take a look at the top programming languages a data scientist should master to work successfully as a data scientist.

Python

Python is a popular general-purpose, dynamic, and widely used language within the data science community. The reason for its growing popularity is that it is the easiest programming language to read and learn. With its excellent algorithm base and the availability of libraries, developers have no difficulty making use of this language. To someone who already knows C/C++ or Java, learning python will open many opportunities in the field of data science.

R

It is one of the most popular languages used in the field of data science to analyze structured and unstructured data. Earlier R was mostly used in academia, but with the emergence of Data Science, the scope of R has increased, for example, it is used by Facebook and Twitter for social network analysis.

The language has many features that sets it apart from other Data Science languages. Knowing the language opens multiple opportunities to work as a data scientist and opens up vistas to work in some of the highest-paying jobs in the world.

Matlab

The name MATLAB stands for matrix laboratory; it is developed and licensed by MathWorks. This language is stable, quick, and ensures reliable algorithms for numerical computation, which is why it is used by academia and industry. The language is widely used by academia, research institutions, industrial enterprises, aviation, and the aerospace industry.

Java

This language runs on Java Virtual Machine (JVM). It is used by MNC organizations to create backend systems and desktop/mobile/web applications. It is demanded that software architects, software engineers, and developers have Java skills. The language has been around for decades and enjoys the attention of millions of enthusiasts.

SQL

SQL stands for Structured Query Language. It is widely used for generating queries and editing information stored in relational databases. Its other purpose for decades has been to store and retrieve data.

Conclusion

It can be concluded that the landscape of data science is fast evolving, meaning there is a growing demand for data specialists. Learning any one of the programming languages mentioned promises a bright future.

No one who wants to become a data scientist needs to know all the languages mentioned, but they must have expertise in at least one language. There is not only a massive demand for qualified data scientists but also a shortage of them. So, if you have a passion for math, statistics, and like discovering answers through data analysis, then become a master of one or more languages mentioned above and enjoy a rewarding career as a data specialist.

(The author is the co-founder at SoftwareSuggest)