YOUR DATA SCIENCE CAREER IN 2021

FACTSHEET
# TABLE OF CONTENT

- **Rundown 2020**
  - The industry: .................................................................................. 4
  - The jobs: .......................................................................................... 5
  - In-Demand skills .............................................................................. 5
  - Hiring Criteria: ................................................................................ 6
  - Salaries: ............................................................................................ 6

- **Outlook 2021**
  - Which Industries Will Hire Data Science Professionals .......... 7
  - Skills that will be in demand .......................................................... 8
  - Hiring Criteria: ................................................................................ 8
  - Projected Salaries ............................................................................ 8

- **How to Become a Data Science professional in 2021** ............. 9
Follow these projections from the industry frontrunners to get on the quickest and the best track.

- In its latest report, TechJury has said that the Big Data industry is set to reach USD 103 billion by 2023 – seven times of what it is at present.
- Building upon similar projections, the 2021 Robert Half Technology Salary Guide has placed Data Science in the short list of “critical technology roles.”

The same report also suggests that the demand for Data Science professionals will skyrocket in the post-COVID period.

These predictions are topped by several other reports that suggest 2021 will be the best time to invest in a Data Science career.

- The industry is growing at a lightning-fast speed.
- Data Science jobs are abundant and are continuously growing.
- Data Science professionals are earning higher salaries than their peers in other fields.
- Data Scientists will have bigger roles to play in business decisions.
- Data Science pay packages will beef-up substantially in 2021.

In 2021, a certified Data Science professional will continue to have:

- Higher job satisfaction
- Better visibility among employers
- Better connect with the industry trends
- Broader career scope
- Greater confidence at work
- Best career opportunities
- Greater job security

So if it’s money, job satisfaction, job security, or career opportunities you are looking for, Data Science could be just the right profession for you.

The Factsheet Your Data Science Career in 2021 gives a sneak peek at where the industry has been in 2020 and where it is heading in 2021.
Rundown 2020

Data Science scored fairly well during the COVID era. Unlike many other roles that were more or less impacted or damaged by it, the overall sentiment for Data Science roles was remarkably positive.

79% of enterprise executives agreed that companies that do not welcome Big Data might lose their competitive positions - Accenture

Here’s the year in a gist:

THE INDUSTRY

Top sectors employing Data Science professionals included Healthcare, Telecommunications, e-commerce, Finance, and Cybersecurity. Professional services companies hired 34 percent of the Data Science workforce, followed by finance and insurance companies at 23 percent. Manufacturing companies hired 10 percent and IT companies 9 percent from the remaining pie. Big companies (with more than 10,000 employees) employed bigger numbers of Data Science professionals.*

Many companies hired away from their website, a trend indicating the rise of hiring in mid and large companies.
THE JOBS

COVID-19 accentuated the demand for Data Science professionals.

Data scientist has topped the LinkedIn’s Emerging Jobs list for three years in a row. The role continues to grow significantly across all industries.

The hiring growth rate for Data Engineers increased by nearly 35 percent since 2015. This role was marked as hard-to-hire talent. A skill not included in the previous reports, Amazon Web Services, was listed as one of the top skills held by Data Engineers.

"The need for Data Science and Machine Learning professionals increased by an average of 50% across several industries in 2020."

"Data Science jobs witnessed a 37 percent annual growth in 2020 and was ranked as the 3rd largest emerging job role after Artificial Intelligence and Robotics."

Data Scientist job role grew the most. And advanced analyst was the runner up.

IN-DEMAND SKILLS

The top three in-demand skills were:

- Machine learning
- Statistics
- Python

Source: KDnuggets.com

Programming Languages

Source: KDnuggets.com
HIRING CRITERIA

In 2020:

- 46.5% sought at least a bachelor’s degree
- 31.4% required a master’s degree and
- 5% looked for candidates with a Ph.D. degree in Data Science, statistics, mathematics, computer science, engineering, IT, economics, and physics-related fields.

Smaller companies looked for a Master’s degree while medium-sized companies preferred a Bachelors. Bigger companies went for a balanced mix of both.

On average, companies looked for candidates with at least 4.2 years of experience as a data scientist and 5.2 years of experience in related fields.

SALARIES

Data Science professionals with five to nine years of experience bagged +9 percent salaries. Above the 10-year mark, this number grew to 13 percent.

Here’s
Outlook 2021

A rapid shift is underway in traditional industries as they move away from surveys, best-guesses, and hunches to more data-driven and factual analysis. LinkedIn's 2020 Emerging Jobs Report says “Data Science roles continue to proliferate across nearly every industry”.

“In 2020 Data Science replaced many job roles like statisticians. This trend is likely to continue in 2021.”

Demand for Data Science professionals skyrocketed in 2020 and the trend is likely to extend in 2021. Experts see this boom to last another decade.

“By 2024, the US will be short of 250,000 skilled data scientists. - McKinsey”

11 million jobs are expected to be created by 2026 in Data Science space- U.S. Bureau of Labor Statistics.

Which Industries Will Hire Data Science Professionals

The nature of their jobs ensures that Data Science professionals will have a place in most industries.

Industries that will hire most Data Science professionals are:

- Information Technology and Services
- Internet
- Computer Software
- Financial Services
- Hospital and Health Care
- Higher Education
SKILLS THAT WILL BE IN DEMAND

Data Science in 2021 will be simpler with no codes or fewer codes technologies.

Deep Learning, machine learning, clustering, and Natural Language Processing will be in high demand. Adding an AWS, Spark, Hadoop, data visualization tools like R, Tableau, and Power BI can significantly up your chances of landing a lucrative profile.

Python will remain the top choice for employers.

Skills likely to gain traction in the near future include:

- Microsoft SQL Server database skills
- Oracle database skills
- Extract, Transform, Load (ETL) skills

HIRING CRITERIA

Communication skills won’t be a priority in most roles.

But you’ll need mathematics, statistics and computer science subject knowledge. While you may not need a master’s or a Ph.D. degree to get into a Data Scientist role, they can help you climb the career ladder as you progress.

PROJECTED SALARIES

The salaries for data science professionals are strong and will continue to grow exponentially in the coming years.
How to Become a Data Science professional in 2021

The demand for Data Science professionals has never been higher.

To get into a Data Science profession, you’ll need a blend of analytical and mathematical skills like multivariable calculus and linear algebra. Many employers look for candidates with expertise in statistics.

The most important Data Science skills to have in 2021 are Machine Learning, Statistics, and Python programming, while the most in-demand machine learning techniques are Deep Learning, Clustering, and Natural Language Processing (NLP).

Landing a Data Science job isn’t as insurmountable as it appears. If you are a recent graduate or a student planning your leap into the world of work, you can try one or more of these steps:

• Read books about data analysis, statistics, and data coding.
• Learn in-demand programming skills.
• Get in touch with the Data Science community.
• Work on your own Data Science projects.

Certification in Data Science will help you prove your potential to employers.

Did you know?

• By 2022, 85% of companies will adopt Big Data and Analytics technologies.
• Professionals who invest in their Data Science career earn 40%-50% higher salaries than their peers’

Are you ready to give your stale career a much-needed face-lift in 2021?
The United States Data Science Institute (USDSI) provides high-end and in-depth technical certifications for aspiring Data Science professionals and is a global leader in Data Science organizational transformation, innovation, and leadership. USDSI researches, designs, and certifies personnel who enter or engage in various emerging Data Science majors. The main goal of USDSI is to certify Data Science professionals so that they can continuously strive to refine and optimize the many roles and jobs in the Data Science field into specific, clearly defined occupations.

To know more, please visit the [website](#)