

What is Data Science

http://www.bigdatatraining.in/data-science-training-chennai/

Oleksii Yehorchenkov Taras Shevchenko National University of Kyiv

License

These materials are available under the Creative Commons Attribution NonCommercial ShareAlike (CC-NC-SA) license https://creativecommons.org/licenses/by-nc-sa/3.0/

What is Data Science?

Data science, also known as **data-driven science**, is an interdisciplinary field about scientific methods, processes and systems to extract knowledge (знання) or insights (розуміння) from data in various forms, either structured or unstructured

https://en.wikipedia.org/wiki/Data_science

What is Data Science?

Data science is a "concept to unify statistics, data analysis and their related methods" in order to "understand and analyze actual phenomena" with data. It employs techniques and theories drawn from many fields within the broad areas of <u>mathematics</u>, <u>statistics</u>, <u>information science</u>, and <u>computer science</u>, in particular from the subdomains of <u>machine learning</u>, <u>classification</u>, <u>cluster analysis</u>, <u>data mining</u>, <u>databases</u>, and <u>visualization</u>.

https://en.wikipedia.org/wiki/Data_science

Who is a Data Scientist?

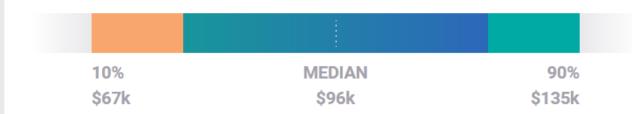
Data scientists use their data and analytical ability to find and interpret rich data sources; manage large amounts of data despite (*B ymobax*) hardware, software, and bandwidth (полоса пропускання) constraints (обмеження); merge data sources; ensure consistency of datasets (забезпечувати узгодженість наборів даних); create visualizations to aid in understanding data; build mathematical models using the data; and present and communicate the data insights/findings. They are often expected to produce answers in days rather than months, work by exploratory analysis and rapid iteration, and to produce and present results with dashboards (displays of current values) rather than papers/reports, as statisticians normally do.

https://en.wikipedia.org/wiki/Data_science

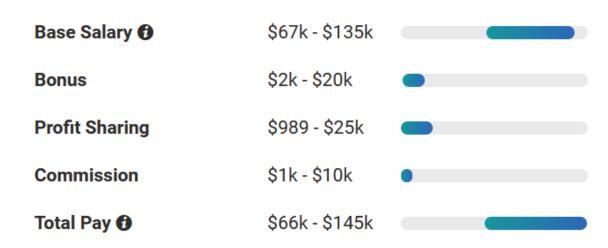
Motivation



Avg. Base Salary (USD)



The average salary for a Data Scientist is \$96,448



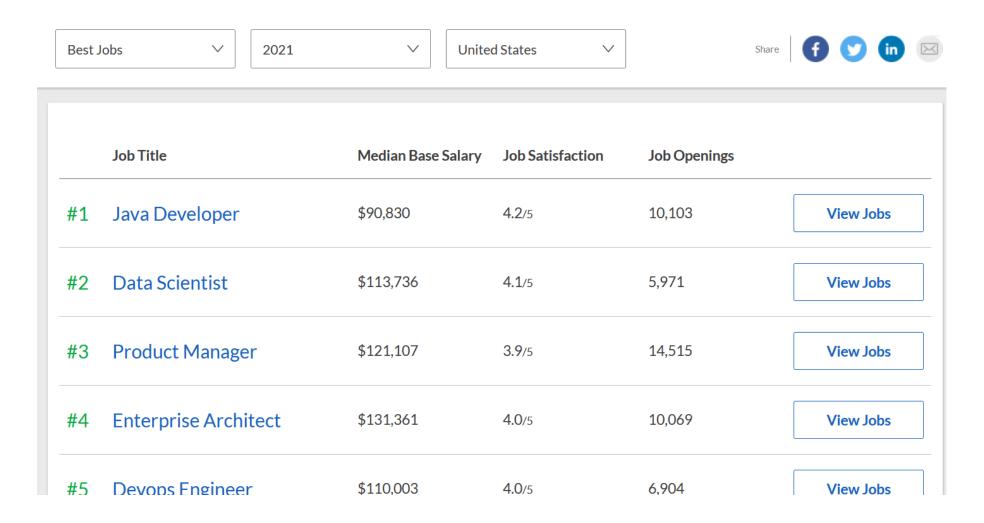
Currency: USD • Updated: Wed Mar 03 2021 •

Individuals Reporting: 8,161

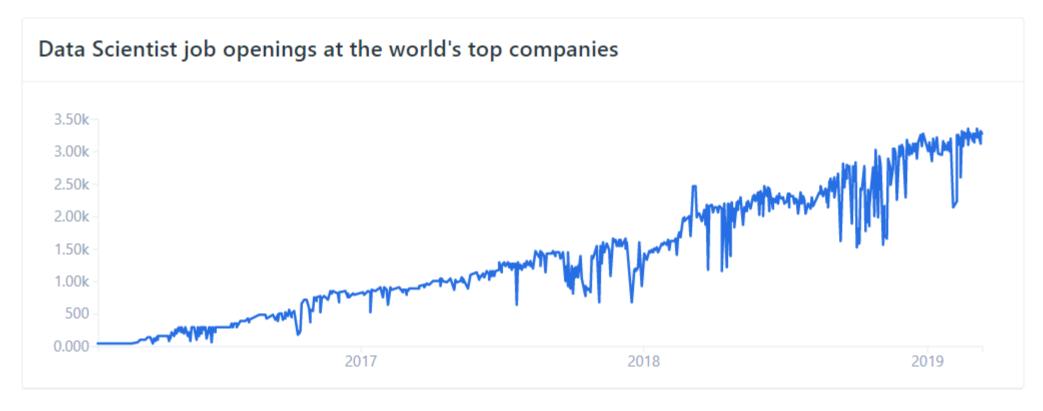
Based on 8,161 salary profiles (last updated Mar 03 2021)

Best jobs

50 Best Jobs in America for 2021



Job growth



Data from Thinknum - Open dataset

Title (Count)

This course

- Introducing you to the track
- Getting tools set up
- Giving you basic background
- Giving you basic skills in Python language

References

 Course materials for the Data Science Specialization: https://www.coursera.org/specialization/jhudatascience/1 https://github.com/DataScienceSpecialization/courses