**[The Three Trending Data Science Jobs and How to Land Them](https://opendatascience.com/the-three-trending-data-science-jobs-and-how-to-land-them/" \t "_blank)**

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There has been a lot of buzz about data scientist jobs recently. And for good reason! Since 2016, data scientist has been at or near the top of Glassdoor’s [Best Jobs in America](https://www.glassdoor.com/List/Best-Jobs-in-America-LST_KQ0,20.htm" \t "_blank) list. But since the job hit the top spot in the list, the field has exploded both in popularity and complexity. In this quickly evolving field, new opportunities are always on the horizon. Perhaps the question to ask is no longer, “Do you want to be a data scientist?” But rather, “What kind of data scientist do you want to be?”

In addition to the core set of skills that all data scientists must master, there are many specializations within the field because business problems can be approached in multiple ways using multiple tools. A lot of infrastructure is required, especially in large companies, in order to store, move, and analyze data. Employers are often looking for data scientists with specific areas of focus. Depending on the industry that you want to work in or the size of your team, you may need to strengthen your data visualization, machine learning, or data curation talents.

In this blog, we will look at three trending data scientist jobs and what it will take to land them.

Data Visualization Engineer

Data, data everywhere and not a drop to drink. The world is awash in data, and companies need experts to handle data so that they don’t drown in it. Data visualization engineers’ package all that fluid data into a form that can be easily digested and understood. Data visualization engineers straddle the data engineering and design worlds by marrying an understanding of the data with the ability to display that information beautifully. According to Lightcast, job postings requesting skills in data analysis and data visualization more than doubled in the last two years.

Data visualization engineers create dashboards, charts, and other visualizations that different stakeholders in a company can use. Data visualization engineers may also use visual tools to identify anomalies in data to support data scientists as part of the data engineering process. They work with many different people in an organization and use a mix of programming and software tools to fulfill requests. They need to understand how data is structured and stored and how to access it. The role is an unusual blend of art and science that may appeal to people who don’t have the extensive computer science or statistics background required to be a data scientist.

[Explore SAS Visual Analytics, a single application for reporting, data visualization and analytics.](https://www.sas.com/gms/redirect.jsp?detail=GMS241832_337964)

Skills needed

In addition to an educational background in graphic design and data science, to become a data visualization engineer you will need proficiency in the following:

* data visualization and dashboarding tools like Tableau or SAS® Visual Analytics
* graphic design principles and best practices
* coding knowledge for data visualization libraries from Python, R, SAS, and Javascript
* leadership, communication, and presentation skills

Recommended training

If you are interested in becoming a data visualization engineer, getting experience with SAS Visual Analytics through [free tutorials and other courses](https://support.sas.com/training/us/paths/va.html) is a good place to start. Also check out the [SAS® Visual Business Analytics Specialist credential](https://www.sas.com/en_us/certification/credentials/bi-analytics/visual-business-analytics.geo.html) to prove your proficiency in designing reports and dashboards all under one platform, [SAS Viya](https://www.sas.com/gms/redirect.jsp?detail=GMS241832_337958).

Machine Learning Engineer

A machine learning engineer uses [artificial intelligence](https://www.sas.com/en_us/insights/analytics/what-is-artificial-intelligence.html) to solve complex data problems by developing models that predict outcomes based on past behavior. A machine learning specialist or machine learning engineer is a vital part of a data science team. After the data sources have been identified and cleansed, the algorithms that analyze the data need to be built. This is where the machine learning specialist comes in. They develop and deploy the models that will extract insights from the data. Demand is rising quickly for this specialized skill set with over 14,000 jobs posted in the U.S. last year.

[Explore SAS Model Manager, the application built for quick deployment of models.](https://www.sas.com/gms/redirect.jsp?detail=GMS241832_337967)

Skills needed

Machine learning specialists still need to be well-versed in core data science principles because they may be called on to consult during the data preparation and software selection phases. In addition, machine learning specialists will need experience with the following in order to be an outstanding candidate:

* an educational background in software engineering or computer science
* programming skills in multiple languages like Python, Java, SAS, and C++
* knowledge of statistics and machine learning techniques
* the ability to collaborate on a large, cross-functional team
* communication skills to explain difficult concepts to nontechnical people

Recommended training

One way to get some of these skills is through the [Machine Learning with SAS® Viya® course](https://www.sas.com/en_us/training/courses/machine-learning-using-sas-viya.geo.html) that will help you prepare for the [Machine Learning Specialist exam](https://www.sas.com/en_us/certification/credentials/advanced-analytics/machine-learning-specialist.geo.html). For some quick hits, check out [Cat Truxillo’s curated playlist](https://www.youtube.com/watch?v=S4PeFiqc19k&list=PLVV6eZFA22QxiVFi6BotaMEAyp6NHo_9Y" \t "_blank) on the [SAS Users YouTube Channel](https://www.youtube.com/sasusers).

Data Engineer

Not to be confused with a data visualization engineer, data engineer is climbing the ranks of best jobs lists and is poised to have a breakout moment. Over 90,000 jobs for machine learning engineers were posted in the U.S. just last year, making data engineer the second most popular job title that requests skills in the data science field. Data engineering is an essential role that builds and manages the systems that store and move data. Organizations who want to invest in data analytics need to ensure that the data is available, clean, and ready to use. Data engineers create the data infrastructure and work closely with data scientists and machine learning specialists to understand their needs. They may also be responsible for educating others in the company about good data practices. No longer the unsung heroes of the data department, data engineering is a great career path for those who are drawn to data management more than data analysis.

[Explore data management solutions such as data prep and governance.](https://www.sas.com/gms/redirect.jsp?detail=GMS241832_337973)

Skills needed

Data engineers need to love data and be up to date on the latest tools. Software engineers often have the right background to transition into data engineering, but a broad understanding of the analytics lifecycle is also important. A successful data engineer who can create and maintain a secure data infrastructure needs the following skills:

* experience with ETL platforms
* advanced coding skills in database and statistical languages like SQL, Python, SAS, or Scala
* can solve complex data problems
* is a data evangelist who can explain the importance of good data governance

Recommended training

Several companies offer professional certifications in data engineering. The [Data Curation Professional learning path](https://www.sas.com/en_us/training/academy-data-science/data-curation-certification.html) at the [SAS Academy for Data Science](https://www.sas.com/en_us/training/academy-data-science.geo.html) is a great place to gain the skills you need to become a data engineer.

No matter where you are in your data science journey, SAS has training through the [SAS Academy for Data Science](https://www.sas.com/en_us/training/academy-data-science.geo.html) and [resources](https://www.sas.com/en_us/training/academy-data-science/data-science-resources.geo.html" \t "_blank) to support you as you become exactly the kind of data scientist you want to be.