



O*NET OnLine

Summary Report for: 15-2051.00 - Data Scientists

[Updated 2021](#)


Develop and implement a set of techniques or analytics applications to transform raw data into meaningful information using data-oriented programming languages and visualization software. Apply data mining, data modeling, natural language processing, and machine learning to extract and analyze information from large structured and unstructured datasets. Visualize, interpret, and report data findings. May create dynamic data reports.

Also see: [Business Intelligence Analysts](#), [Clinical Data Managers](#)

[View report:](#)
[Summary](#)
[Details](#)
[Custom](#)
[Easy Read](#)
[Veterans](#)
[Español](#)

[Tasks](#) | [Detailed Work Activities](#) | [Job Zone](#) | [Credentials](#) | [Wages & Employment](#) | [Job Openings](#)

Tasks

[+](#) [-](#) 5 of 16 displayed

- [+](#) Analyze, manipulate, or process large sets of data using statistical software.
- [+](#) Apply feature selection algorithms to models predicting outcomes of interest, such as sales, attrition, and healthcare use.
- [+](#) Apply sampling techniques to determine groups to be surveyed or use complete enumeration methods.
- [+](#) Clean and manipulate raw data using statistical software.
- [+](#) Compare models using statistical performance metrics, such as loss functions or proportion of explained variance.

[back to top](#)

Detailed Work Activities

[+](#) [-](#) 5 of 16 displayed

- [+](#) Advise others on analytical techniques.
- [+](#) Analyze business or financial data.
- [+](#) Analyze data to identify or resolve operational problems.
- [+](#) Analyze data to identify trends or relationships among variables.
- [+](#) Analyze data to inform operational decisions or activities.

[back to top](#)

Job Zone

Title Job Zone Four: Considerable Preparation Needed

Education Most of these occupations require a four-year bachelor's degree, but some do not.

Related Experience A considerable amount of work-related skill, knowledge, or experience is needed for these occupations. For example, an accountant must complete four years of college and work for several years in accounting to be considered qualified.

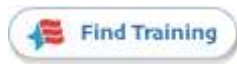
Job Training Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.

Job Zone Examples Many of these occupations involve coordinating, supervising, managing, or training others. Examples include real estate brokers, sales managers, database administrators, graphic designers, chemists, art directors, and cost estimators.

SVP Range (7.0 to < 8.0)

[back to top](#)

Credentials

[back to top](#)

Wages & Employment Trends

Median wage data for **Data Scientists and Mathematical Science Occupations, All Other**.
Employment data for **Data Scientists and Mathematical Science Occupations, All Other**.
Industry data for **Data Scientists and Mathematical Science Occupations, All Other**.

Median wages (2020) \$47.23 hourly, \$98,230 annual

State wages

Local wages ZIP Code:

Employment (2020) 63,200 employees

Projected growth (2020-2030) ■■■■ Much faster than average (15% or higher)

Projected job openings (2020-2030) 7,100

State trends

Top industries (2020) [Professional, Scientific, and Technical Services](#)
[Finance and Insurance](#)

Source: Bureau of Labor Statistics [2020 wage data](#) and [2020-2030 employment projections](#). "Projected growth" represents the estimated change in total employment over the projections period (2020-2030). "Projected job openings" represent openings due to growth and replacement.

[back to top](#)

Job Openings on the Web

[back to top](#)