

Occupational Project Handout

Career: Data Scientist

Annual Salary: The average annual salary for a data scientist is \$118,370, roughly ranging between is \$69,230 to \$183,820. The median annual salary for a senior data scientist (who oversees other departmental data scientists and has several years of data science experience) is \$171,755, roughly ranging between \$147,000 - \$200,000 (“Master’s in Data Science, n.d.).

Location and Position: Because nearly all companies are in need of a data scientist, there are jobs worldwide and within nearly all types of organizations. Most data scientists will be working “behind the scenes” in an office setting and may present their findings in staff meetings.

Demand: There is a high and increasing demand for data scientists. Even though the economy currently appears to be entering a recession, data scientists will still be needed to manage and interpret data for companies. Additionally, demand for data scientists in certain sectors that are currently relevant like health care and manufacturing may increase a small amount.

Job Outlook: Although it did not include “data scientist” in its index of jobs, the Occupational Outlook Handbook (OOH) from the United States Bureau of Labor Statistics (BLS) project a 30 percent growth in employment from 2018 to 2028 for “mathematicians and statisticians”, the next most closely-related occupation. For reference, OOH claim that the average growth rate for all occupations across the same ten-year period is around five percent (“Mathematicians”, 2019).

Similar Occupations: Statistician, data analyst, computer scientist, business analyst, database manager, and programmer are all similar to the position of data scientist. Data analysis and statistics are closely related and nearly interchangeable by nature with data science, while computer programming comprises of nearly all of the work that data scientists do on a daily basis.

Online Resources: Because the rise of programming languages like R is so recent and a majority of programs reside in “packages” created by other users for public use and to be installed on other computers, many users troubleshoot their issues simply by performing a Google search of their error message or their code. Stack Exchange (stackexchange.com) and Stack Overflow (stackoverflow.com) are commonly frequented sites for programming support provided by other users. Additionally, Kaggle (kaggle.com) hosts different online competitions for data scientists. Some users also upload or “push” their code to GitHub (github.com), a Google Drive for programming of sorts, for others to view and use.

Job Search Strategies: Typical job search websites like Handshake, LinkedIn, and Indeed host many of the jobs in data science. The Data Science Association (datascienceassn.org), Digital Analytics Association (digitalanalyticsassociation.org), and Association of Data Scientists (adasci.org) are some informal professional organizations for data scientists. At Loyola, the Mathematics and Statistics Club can provide tutoring and the Department of Mathematics and Statistics have many professors with extensive prior data science and statistical experience (luc.edu/math/facstaff.shtml). Additionally, a Data Science major will be added in Fall 2020.