



CAREER PROFILE

Data Scientists

Starting Salary Range ^{iii,i}

\$92,000–\$149,000

Education/ Training

- Bachelor's degree in a related STEM field
- Master's degree or doctorate in a related STEM field
- Internships and/or prior work experience
- Experience with coding languages such as SAS, SQL, R, and Python preferred

Who are they? ^{i,ii}

Data scientists are the professionals who use analytical thinking to take a business from good to great. They love statistics and are passionate about using information and data to tell stories. They have curious minds and are also creative—they can definitely think outside the box. Data scientists thrive when they can use hard evidence and up-to-date information to solve problems and decipher puzzles. They work across industries and can be found at companies across the country. At Stanley Black & Decker, data scientists are behind the scenes helping people running many different parts of the company understand what complex sets of numbers and information are telling them. If you love facts and figures—and maybe even quote your favorite athlete's stats with fluency—you might excel as a data scientist.

What do they do? ^{i,ii}

Data scientists provide rigorous analyses that help companies optimize their strategies and business models. Today's businesses are collecting massive amounts of data on their products, customers, and more; data scientists are responsible for finding patterns and forming hypotheses based on these data. For example, data scientists can help companies like Stanley Black & Decker understand what their customers want to buy and how they want to find it. They help other parts of the organization understand what the data is telling them by developing visualizations of the data, such as charts and tables. They may use machine learning, computer science, and programming languages like SAS, R, SQL, and Python. Data scientists' work heavily depends on mathematical and analytical skills, but equally important are their knowledge of the industry, common sense, and use of contextual information.

How do I become one? ^{i,iii}

A data scientist will need a bachelor's degree, and an advanced degree like a master's degree or a PhD may be required for some positions. A degree in data science, analytics, computer science, or computer engineering would be beneficial in this position. To prepare for this career, students should concentrate on building analytical and critical-

thinking skills in courses like computer science, physics, algebra, calculus, and statistics. Data scientists will also need excellent communication skills and a comfortability working across teams.

Job Outlook ^{ii,iii}

Computer and information technology occupations, including data science, are growing even more rapidly than the national average for all occupations. Companies across the country are collecting more data than ever, so there are opportunities for data scientists across many different industries. The annual median income for these jobs is also higher than the median for all occupations, making it a very promising career choice.

ⁱ "Occupational Employment Statistics." Bureau of Labor Statistics. <https://www.bls.gov/oes/2018/may/oes151111.html>

ⁱⁱ "Occupational Outlook Handbook." Bureau of Labor Statistics. <https://www.bls.gov/ooh/computer-and-information-technology/computer-and-information-research-scientists.html>

ⁱⁱⁱ "Occupational Outlook Handbook." Bureau of Labor Statistics. <https://www.bls.gov/ooh/computer-and-information-technology/computer-and-information-research-scientists.html>