Responsibilities

The professionals at the National Security Agency (NSA) have one common goal: to protect our nation. The mission requires a strong offense and a steadfast defense. The offense collects, processes, and disseminates intelligence information derived from foreign signals for intelligence and counterintelligence purposes. The defense prevents adversaries from gaining access to sensitive classified national security information. NSA is the nation's leader in providing foreign signals intelligence while also protecting U.S. government information systems, forging the frontier of communications, and data analysis. We serve the American people by applying technical skills to meaningful work, keeping our friends and families safe for generations to come. You will make a lasting impact serving your country as a Data Scientist at the National Security Agency, using your curiosity to analyze large data sets to inform decision-making against foreign threats. We are looking for critical thinkers, problem solvers, and motivated individuals who are enthusiastic about data and believe that answers to hard questions lie in the yet-to-be-told story of diverse, complicated data sets. You will employ your mathematical science, computer science, and quantitative analysis skills to ensure solutions to complex data problems and take full advantage of the NSA's software and hardware capabilities in all areas of our enterprise, including analytic capabilities, research, and foreign intelligence operations. Data Scientists are hired into positions directly supporting a technical mission office or the Data Scientist Development Program (DSDP). The NSA/CSS Data Scientist Development Program is a three-year opportunity to build your data science talent, experience the breadth of data science at NSA through six- to nine-month assignments in a variety of diverse organizations, and collaborate with NSA's experts in the field of data science. You will have opportunities to attend technical conferences with experts from industry and academia. You will routinely discuss and share NSA's challenges and successes at weekly technical roundtables. We foster an environment where you will develop your data science skills, allowing you to quickly contribute to NSA's mission. As a member of a technical mission office or the DSDP, Data Scientists tackle challenging real-world problems leveraging big data, high-performance computing, machine learning, and a breadth of other methodologies. As a Data Scientist at NSA, responsibilities may include: - Collecting and combining data from multiple sources - Uncovering and exploring anomalous data (including metadata) - Applying the scientific process to data evaluation, performing statistical inference, and data mining - Developing analytic plans, engineer supporting algorithms, and design and implement solutions which execute analytic plans. - Designing and developing tools and techniques for analysis - Analyzing data using mathematical/statistical methods - Evaluating, documenting, and communicating research processes, analyses, and results to customers, peers, and leadership - Creating interpretable visualizations

Skills

The ideal candidate is someone with a desire for continual learning and strong problem-solving, analytic and interpersonal skills. You might be a great fit for our team if any of the following
describe you:
- Completed a degree program in the fields of mathematics, statistics, computer science, computational sciences, or a passion for rigorous analysis of data
- Tenacity, integrity, persistence, and willingness to learn
- Ability to solve complex problems
- Use critical thinking and reasoning to make analytic determinations
- Works effectively in a collaborative environment
- Strong communications skills to both technical and non-technical audiences
- The desire to serve over 300 million fellow Americans and make a difference in world events

Position Summary

NSA is in search of Computer Science professionals to solve complex problems, test innovative approaches and research new solutions to storing, manipulating, and presenting information. We are looking for you to apply your computer science expertise to projects that seek to create new standards for the transformation of information. If you want to develop technologies and tools and be a part of cutting edge innovations, join our team of experts! Help protect national security interests as part of the world's most advanced team of computer science professionals!

Mandatory Qualification Reqs

Candidates for the NSA's Data Scientist roles are asked to complete a data science examination evaluating their knowledge of statistics, mathematics, and computer science topics that pertain to data science work. Passing this examination is a requirement in order to be considered for selection into a data scientist position.

Entry Level/Developmental

*The qualifications listed are the minimum acceptable to be considered for the position. Salary offers are based on candidates' education level and years of experience relevant to the position and also take into account information provided by the hiring manager/organization regarding the work level for the position.

Entry is with a Bachelor's degree and no experience. An Associate's degree plus 2 years of relevant experience may be considered for individuals with in-depth experience that is clearly related to the position.

Degree must be in Mathematics, Applied Mathematics, Statistics, Applied Statistics, Machine Learning, Data Science, Operations Research, or Computer Science. A degree in a related field (e.g., Computer Information Systems, Engineering), a degree in the physical/hard sciences (e.g., physics, chemistry, biology, astronomy), or other science disciplines (i.e., behavioral, social, and life) may be considered if it includes a concentration of coursework (typically 5 or more courses) in advanced mathematics (typically 200 level or higher; such as calculus, differential equations, discrete mathematics) and/or computer science (e.g., algorithms, programming, data structures, data mining, artificial intelligence). College-level Algebra or other math courses intended to meet a basic college level requirement, or upper level math courses designated as elementary or basic do not count.

Note: A broader range of degrees will be considered if accompanied by a Certificate in Data Science from an accredited college/university. Relevant experience must be in designing/implementing machine learning, data mining, advanced analytical algorithms,
programming, data science, advanced statistical analysis, artificial intelligence, and/or software engineering. Experience in more than one area is strongly preferred.

Full Performance

*The qualifications listed are the minimum acceptable to be considered for the position. Salary offers are based on candidates’ education level and years of experience relevant to the position and also take into account information provided by the hiring manager/organization regarding the work level for the position.

Entry is with a Bachelor's degree plus 3 years of relevant experience or a Master's degree plus 1 year of relevant experience or a Doctoral degree and no experience. An Associate’s degree plus 5 years of relevant experience may be considered for individuals with in-depth experience that is clearly related to the position.

Degree must be in Mathematics, Applied Mathematics, Statistics, Applied Statistics, Machine Learning, Data Science, Operations Research, or Computer Science. A degree in a related field (e.g., Computer Information Systems, Engineering), a degree in the physical/hard sciences (e.g., physics, chemistry, biology, astronomy), or other science disciplines (i.e., behavioral, social, and life) may be considered if it includes a concentration of coursework (typically 5 or more courses) in advanced mathematics (typically 200 level or higher; such as calculus, differential equations, discrete mathematics) and/or computer science (e.g., algorithms, programming, data structures, data mining, artificial intelligence). College-level Algebra or other math courses intended to meet a basic college level requirement, or upper level math courses designated as elementary or basic do not count.

Note: A broader range of degrees will be considered if accompanied by a Certificate in Data Science from an accredited college/university. Relevant experience must be in two or more of the following: designing/implementing machine learning, data mining, advanced analytical algorithms, programming, data science, advanced statistical analysis, artificial intelligence, or software engineering.

Senior

*The qualifications listed are the minimum acceptable to be considered for the position. Salary offers are based on candidates’ education level and years of experience relevant to the position and also take into account information provided by the hiring manager/organization regarding the work level for the position.

Entry is with a Bachelor's degree plus 6 years of relevant experience or a Master's degree plus 4 years of relevant experience or a Doctoral degree plus 2 years of relevant experience. An Associate’s degree plus 8 years of relevant experience may be considered for individuals with in-depth experience that is clearly related to the position.

Degree must be in Mathematics, Applied Mathematics, Statistics, Applied Statistics, Machine Learning, Data Science, Operations Research, or Computer Science. A degree in a related field (e.g., Computer Information Systems, Engineering), a degree in the physical/hard sciences (e.g., physics, chemistry, biology, astronomy), or other science disciplines (i.e., behavioral, social, life)
may be considered if it includes a concentration of coursework (typically 5 or more courses) in advanced mathematics (typically 200 level or higher; such as calculus, differential equations, discrete mathematics) and/or computer science (e.g., algorithms, programming, data structures, data mining, artificial intelligence). College-level Algebra or other math courses intended to meet a basic college level requirement, or upper level math courses designated as elementary or basic do not count. Note: A broader range of degrees will be considered if accompanied by a Certificate in Data Science from an accredited college/university.

Relevant experience must be in two or more of the following: designing/implementing machine learning, data mining, advanced analytical algorithms, programming, data science, advanced statistical analysis, artificial intelligence, or software engineering.

Expert

*The qualifications listed are the minimum acceptable to be considered for the position. Salary offers are based on candidates' education level and years of experience relevant to the position and also take into account information provided by the hiring manager/organization regarding the work level for the position.

Entry is with a Bachelor's degree plus 9 years of relevant experience or a Master's degree plus 7 years of relevant experience or a Doctoral degree plus 5 years of relevant experience. An Associate's degree plus 11 years of relevant experience may be considered for individuals with in-depth experience that is clearly related to the position.

Degree must be in Mathematics, Applied Mathematics, Statistics, Applied Statistics, Machine Learning, Data Science, Operations Research, or Computer Science. A degree in a related field (e.g., Computer Information Systems, Engineering), a degree in the physical/hard sciences (e.g., physics, chemistry, biology, astronomy), or other science disciplines (i.e., behavioral, social, life) may be considered if it includes a concentration of coursework (typically 5 or more courses) in advanced mathematics (typically 200 level or higher; such as calculus, differential equations, discrete mathematics) and/or computer science (e.g., algorithms, programming, data structures, data mining, artificial intelligence). College-level Algebra or other math courses intended to meet a basic college level requirement, or upper level math courses designated as elementary or basic do not count.

Note: A broader range of degrees will be considered if accompanied by a Certificate in Data Science from an accredited college/university.

Relevant experience must be in two or more of the following: designing/implementing machine learning, data mining, advanced analytical algorithms, programming, data science, advanced statistical analysis, artificial intelligence, or software engineering.