

This can involve tasks such as data cleaning, data visualization, and exploratory data analysis to gain insights into the data and develop hypotheses about relationships between variables. In contrast, data science deals with quantitative and qualitative data (e.g., from images, text, sensors, transactions, customer information, etc.) and emphasizes prediction and action. For example, a data analyst might analyze sales data to identify trends in customer behavior and make recommendations for marketing strategies. Data science, on the other hand, is a more complex and iterative process that involves working with larger, more complex datasets that often require advanced computational and statistical methods to analyze. F. Others argue that data science is distinct from statistics because it focuses on problems and techniques unique to digital data. F. Data scientists often work with unstructured data such as text or images and use machine learning algorithms to build predictive models and make data-driven decisions. He reasoned that a new name would help statistics shed inaccurate stereotypes, such as being synonymous with accounting or limited to describing data. However, the definition was still in flux. Later, attendees at a 1992 statistics symposium at the University of Montpellier II acknowledged the emergence of a new discipline focused on data of various origins and forms, combining established concepts and principles of statistics and data analysis with computing. Cleveland. As such, it incorporates skills from computer science, statistics, information science, mathematics, data visualization, information visualization, data sonification, data integration, graphic design, complex systems, communication and business. Later, attendees at a 1992 statistics symposium at the University of Montpellier II acknowledged the emergence of a new discipline focused on data of various origins and forms, combining established concepts and principles of statistics and data analysis with computing. Both fields require a solid foundation in statistics, programming, and data visualization, as well as the ability to communicate findings effectively to both technical and non-technical audiences. They work at the intersection of mathematics, computer science, and domain expertise to solve complex problems and uncover hidden patterns in large datasets. Data science is an interdisciplinary academic field that uses statistics, scientific computing, scientific methods, processes, algorithms and systems to extract or extrapolate knowledge and insights from noisy, structured, and unstructured data. For instance, a data scientist might develop a recommendation system for an e-commerce platform by analyzing user behavior patterns and using machine learning algorithms to predict user preferences. In 1996, the International Federation of Classification Societies became the first conference to specifically feature data science as a topic. Data scientists are responsible for breaking down big data into usable information and creating software and algorithms that help companies and organizations determine optimal operations. He reasoned that a new name would help statistics shed inaccurate stereotypes, such as being synonymous with accounting or limited to describing data. He describes data science as an applied field growing out of traditional statistics. In 1998, Hayashi Chikio argued for data science as a new, interdisciplinary concept, with three aspects: data design, collection, and analysis. Others argue that data science is distinct from statistics because it focuses on problems and techniques unique to digital data. In 1996, the International Federation of Classification Societies became the first conference to specifically feature data science as a topic.