

Many statisticians, including Nate Silver, have argued that data science is not a new field, but rather another name for statistics. There is still no consensus on the definition of data science, and it is considered by some to be a buzzword. For example, a data analyst might analyze sales data to identify trends in customer behavior and make recommendations for marketing strategies. In 1996, the International Federation of Classification Societies became the first conference to specifically feature data science as a topic. However, data science is different from computer science and information science. Jeff Wu again suggested that statistics should be renamed data science. Turing Award winner Jim Gray imagined data science as a "fourth paradigm" of science (empirical, theoretical, computational, and now data-driven) and asserted that "everything about science is changing because of the impact of information technology" and the data deluge. There is still no consensus on the definition of data science, and it is considered by some to be a buzzword. Others argue that data science is distinct from statistics because it focuses on problems and techniques unique to digital data. Data science is an interdisciplinary field focused on extracting knowledge from typically large data sets and applying the knowledge and insights from that data to solve problems in a wide range of application domains. In 2012, technologists Thomas H. Vasant Dhar writes that statistics emphasizes quantitative data and description. 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. F. Data science also integrates domain knowledge from the underlying application domain (e.g., natural sciences, information technology, and medicine). In 2003, Columbia University launched The Journal of Data Science. While both fields involve working with data, data science is more of an interdisciplinary field that involves the application of statistical, computational, and machine learning methods to extract insights from data and make predictions, while data analysis is more focused on the examination and interpretation of data to identify patterns and trends. While data analysis focuses on extracting insights from existing data, data science goes beyond that by incorporating the development and implementation of predictive models to make informed decisions. In 2012, technologists Thomas H. After the 1985 lecture at the Chinese Academy of Sciences in Beijing, in 1997 C. 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. Data analysts typically use statistical methods to test these hypotheses and draw conclusions from the data. Despite these differences, data science and data analysis are closely related fields and often require similar skill sets. During the 1990s, popular terms for the process of finding patterns in datasets (which were increasingly large) included "knowledge discovery" and "data mining".