

There is still no consensus on the definition of data science, and it is considered by some to be a buzzword. The field encompasses preparing data for analysis, formulating data science problems, analyzing data, developing data-driven solutions, and presenting findings to inform high-level decisions in a broad range of application domains. 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 describes data science as an applied field growing out of traditional statistics. In 1985, in a lecture given to the Chinese Academy of Sciences in Beijing, C. In 2012, technologists Thomas H. However, the definition was still in flux. Data science is a "concept to unify statistics, data analysis, informatics, and their related methods" to "understand and analyze actual phenomena" with data. For example, a data analyst might analyze sales data to identify trends in customer behavior and make recommendations for marketing strategies. Despite these differences, data science and data analysis are closely related fields and often require similar skill sets. Many statisticians, including Nate Silver, have argued that data science is not a new field, but rather another name for statistics. "Data science" became more widely used in the next few years: in 2002, the Committee on Data for Science and Technology launched the Data Science Journal. In 1985, in a lecture given to the Chinese Academy of Sciences in Beijing, C. Data science is a "concept to unify statistics, data analysis, informatics, and their related methods" to "understand and analyze actual phenomena" with data. They work at the intersection of mathematics, computer science, and domain expertise to solve complex problems and uncover hidden patterns in large datasets. However, data science is different from computer science and information science. However, the definition was still in flux. Data analysts typically use statistical methods to test these hypotheses and draw conclusions from the data. It uses techniques and theories drawn from many fields within the context of mathematics, statistics, computer science, information science, and domain knowledge. Though it was used by the National Science Board in their 2005 report "Long-Lived Digital Data Collections: Enabling Research and Education in the 21st Century", it referred broadly to any key role in managing a digital data collection. Data science is multifaceted and can be described as a science, a research paradigm, a research method, a discipline, a workflow, and a profession. In 2015, the American Statistical Association identified database management, statistics and machine learning, and distributed and parallel systems as the three emerging foundational professional communities. Cleveland. The field encompasses preparing data for analysis, formulating data science problems, analyzing data, developing data-driven solutions, and presenting findings to inform high-level decisions in a broad range of application domains.