

The term "data science" has been traced back to 1974, when Peter Naur proposed it as an alternative name to computer science. "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. Data science is multifaceted and can be described as a science, a research paradigm, a research method, a discipline, a workflow, and a profession. There is still no consensus on the definition of data science, and it is considered by some to be a buzzword. During the 1990s, popular terms for the process of finding patterns in datasets (which were increasingly large) included "knowledge discovery" and "data mining". Jeff Wu again suggested that statistics should be renamed data science. 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. He reasoned that a new name would help statistics shed inaccurate stereotypes, such as being synonymous with accounting or limited to describing data. After the 1985 lecture at the Chinese Academy of Sciences in Beijing, in 1997 C. In 1962, John Tukey described a field he called "data analysis", which resembles modern data science. 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. 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. Andrew Gelman of Columbia University has described statistics as a non-essential part of data science. Others argue that data science is distinct from statistics because it focuses on problems and techniques unique to digital data. Jeff Wu used the term "data science" for the first time as an alternative name for statistics. In addition to statistical analysis, data science often involves tasks such as data preprocessing, feature engineering, and model selection. During the 1990s, popular terms for the process of finding patterns in datasets (which were increasingly large) included "knowledge discovery" and "data mining". 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. The modern conception of data science as an independent discipline is sometimes attributed to William S. Statistician Nathan Yau, drawing on Ben Fry, also links data science to human–computer interaction: users should be able to intuitively control and explore data. In 2012, technologists Thomas H. 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. A data scientist is a professional who creates programming code and combines it with statistical knowledge to create insights from data. Data science is a "concept to unify statistics, data analysis, informatics, and their related methods" to "understand and analyze actual phenomena" with data.