

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. There is still no consensus on the definition of data science, and it is considered by some to be a buzzword. Jeff Wu again suggested that statistics should be renamed data science. Data analysis typically involves working with smaller, structured datasets to answer specific questions or solve specific problems. In 2003, Columbia University launched The Journal of Data Science. Cleveland. In 1962, John Tukey described a field he called "data analysis", which resembles modern data science. Big data is a related marketing term. However, data science is different from computer science and information science. Stanford professor David Donoho writes that data science is not distinguished from statistics by the size of datasets or use of computing and that many graduate programs misleadingly advertise their analytics and statistics training as the essence of a data-science program. 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 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. Jeff Wu again suggested that statistics should be renamed data science. 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. 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. Stanford professor David Donoho writes that data science is not distinguished from statistics by the size of datasets or use of computing and that many graduate programs misleadingly advertise their analytics and statistics training as the essence of a data-science program. F. 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. After the 1985 lecture at the Chinese Academy of Sciences in Beijing, in 1997 C. Jeff Wu again suggested that statistics should be renamed data science. There is still no consensus on the definition of data science, and it is considered by some to be a buzzword. In addition to statistical analysis, data science often involves tasks such as data preprocessing, feature engineering, and model selection. In summary, data analysis and data science are distinct yet interconnected disciplines within the broader field of data management and analysis. Data science is multifaceted and can be described as a science, a research paradigm, a research method, a discipline, a workflow, and a profession. However, the definition was still in flux.