Data analysts typically use statistical methods to test these hypotheses and draw conclusions from the data. 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. Jeff Wu used the term "data science" for the first time as an alternative name for statistics. Data science and data analysis are both important disciplines in the field of data management and analysis, but they differ in several key ways. The professional title of "data scientist" has been attributed to DJ Patil and Jeff Hammerbacher in 2008. In summary, data analysis and data science are distinct yet interconnected disciplines within the broader field of data management and analysis. Andrew Gelman of Columbia University has described statistics as a non-essential part of data science. 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. Data analysis focuses on extracting insights and drawing conclusions from structured data, while data science involves a more comprehensive approach that combines statistical analysis, computational methods, and machine learning to extract insights, build predictive models, and drive data-driven decision-making. "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. 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 scientists are often responsible for collecting and cleaning data, selecting appropriate analytical techniques, and deploying models in real-world scenarios. 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. 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. 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. Data science is multifaceted and can be described as a science, a research paradigm, a research method, a discipline, a workflow, and a profession. 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. Data analysis typically involves working with smaller, structured datasets to answer specific questions or solve specific problems. After the 1985 lecture at the Chinese Academy of Sciences in Beijing, in 1997 C. F. In 1996, the International Federation of Classification Societies became the first conference to specifically feature data science as a topic. Data scientists are often responsible for collecting and cleaning data, selecting appropriate analytical techniques, and deploying models in real-world scenarios. 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.