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 analysis typically involves working with smaller, structured datasets to answer specific questions or solve specific problems. 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. 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. In 2003, Columbia University launched The Journal of Data Science. Many statisticians, including Nate Silver, have argued that data science is not a new field, but rather another name for statistics. A data scientist is a professional who creates programming code and combines it with statistical knowledge to create insights from data. After the 1985 lecture at the Chinese Academy of Sciences in Beijing, in 1997 C. In summary, data analysis and data science are distinct yet interconnected disciplines within the broader field of data management and analysis. Jeff Wu again suggested that statistics should be renamed data science. After the 1985 lecture at the Chinese Academy of Sciences in Beijing, in 1997 C. Others argue that data science is distinct from statistics because it focuses on problems and techniques unique to digital data. There is still no consensus on the definition of data science, and it is considered by some to be a buzzword. 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 2015, the American Statistical Association identified database management, statistics and machine learning, and distributed and parallel systems as the three emerging foundational professional communities. The term "data science" has been traced back to 1974, when Peter Naur proposed it as an alternative name to computer 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. The modern conception of data science as an independent discipline is sometimes attributed to William S. 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. F. There is still no consensus on the definition of data science, and it is considered by some to be a buzzword. 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.