Andrew Gelman of Columbia University has described statistics as a non-essential part of data science. In 2014, the American Statistical Association's Section on Statistical Learning and Data Mining changed its name to the Section on Statistical Learning and Data Science, reflecting the ascendant popularity of data science. In 2003, Columbia University launched The Journal of Data Science. In 2012, technologists Thomas H. Data scientists are responsible for breaking down big data into usable information and creating software and algorithms that help companies and organizations determine optimal operations. 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. It uses techniques and theories drawn from many fields within the context of mathematics, statistics, computer science, information science, and domain knowledge. Data science also integrates domain knowledge from the underlying application domain (e.g., natural sciences, information technology, and medicine). 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. In addition to statistical analysis, data science often involves tasks such as data preprocessing, feature engineering, and model selection. The term "data science" has been traced back to 1974, when Peter Naur proposed it as an alternative name to computer science. For example, a data analyst might analyze sales data to identify trends in customer behavior and make recommendations for marketing strategies. Data analysts typically use statistical methods to test these hypotheses and draw conclusions from the data. In a 2001 paper, he advocated an expansion of statistics beyond theory into technical areas; because this would significantly change the field, it warranted a new name. In 2003, Columbia University launched The Journal of Data Science. Both fields require a solid foundation in statistics, programming, and data visualization, as well as the ability to communicate findings effectively to both technical and non-technical audiences. 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. In 1985, in a lecture given to the Chinese Academy of Sciences in Beijing, C. The term "data science" has been traced back to 1974, when Peter Naur proposed it as an alternative name to computer science. 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. Big data is a related marketing term. The term "data science" has been traced back to 1974, when Peter Naur proposed it as an alternative name to computer science. Both fields play vital roles in leveraging the power of data to understand patterns, make informed decisions, and solve complex problems across various domains. While data analysis focuses on extracting insights from existing data, data science goes beyond that by incorporating the development and implementation of predictive models to make informed decisions.