The professional title of "data scientist" has been attributed to DJ Patil and Jeff Hammerbacher in 2008. 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. While both fields involve working with data, data science is more of an interdisciplinary field that involves the application of statistical, computational, and machine learning methods to extract insights from data and make predictions, while data analysis is more focused on the examination and interpretation of data to identify patterns and trends. 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. However, data science is different from computer science and information science. Data science is a "concept to unify statistics, data analysis, informatics, and their related methods" to "understand and analyze actual phenomena" with data. 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. They work at the intersection of mathematics, computer science, and domain expertise to solve complex problems and uncover hidden patterns in large datasets. He describes data science as an applied field growing out of traditional statistics. In 2012, technologists Thomas H. 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. The term "data science" has been traced back to 1974, when Peter Naur proposed it as an alternative name to computer science. The term "data science" has been traced back to 1974, when Peter Naur proposed it as an alternative name to computer science. A decade later, they reaffirmed it, stating that "the job is more in demand than ever with employers". Jeff Wu again suggested that statistics should be renamed data science. Data scientists often work with unstructured data such as text or images and use machine learning algorithms to build predictive models and make data-driven decisions. 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. 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. Data science and data analysis are both important disciplines in the field of data management and analysis, but they differ in several key ways. For example, a data analyst might analyze sales data to identify trends in customer behavior and make recommendations for marketing strategies. 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. 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. In 1962, John Tukey described a field he called "data analysis", which resembles modern data science.