Davenport and DJ Patil declared "Data Scientist: The Sexiest Job of the 21st Century", a catchphrase that was picked up even by major-city newspapers like the New York Times and the Boston Globe. Despite these differences, data science and data analysis are closely related fields and often require similar skill sets. 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. In 2012, technologists Thomas H. He describes data science as an applied field growing out of traditional statistics. 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. In 2012, technologists Thomas H. 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. 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. In summary, data analysis and data science are distinct yet interconnected disciplines within the broader field of data management and analysis. During the 1990s, popular terms for the process of finding patterns in datasets (which were increasingly large) included "knowledge discovery" and "data mining". Data science and data analysis are both important disciplines in the field of data management and analysis, but they differ in several key ways. After the 1985 lecture at the Chinese Academy of Sciences in Beijing, in 1997 C. In 2003, Columbia University launched The Journal of Data Science. Data analysis typically involves working with smaller, structured datasets to answer specific questions or solve specific problems. The professional title of "data scientist" has been attributed to DJ Patil and Jeff Hammerbacher in 2008. The term "data science" has been traced back to 1974, when Peter Naur proposed it as an alternative name to computer science. 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. 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. They work at the intersection of mathematics, computer science, and domain expertise to solve complex problems and uncover hidden patterns in large datasets. 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. He reasoned that a new name would help statistics shed inaccurate stereotypes, such as being synonymous with accounting or limited to describing data. 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. F. They work at the intersection of mathematics, computer science, and domain expertise to solve complex problems and uncover hidden patterns in large datasets.