In summary, data analysis and data science are distinct yet interconnected disciplines within the broader field of data management and analysis. 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. 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. Andrew Gelman of Columbia University has described statistics as a non-essential part of data science. This can involve tasks such as data cleaning, data visualization, and exploratory data analysis to gain insights into the data and develop hypotheses about relationships between variables. The professional title of "data scientist" has been attributed to DJ Patil and Jeff Hammerbacher in 2008. 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 and data analysis are both important disciplines in the field of data management and analysis, but they differ in several key ways. During the 1990s, popular terms for the process of finding patterns in datasets (which were increasingly large) included "knowledge discovery" and "data mining". He describes data science as an applied field growing out of traditional statistics. However, data science is different from computer science and information science. F. 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. There is still no consensus on the definition of data science, and it is considered by some to be a buzzword. 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 summary, data analysis and data science are distinct yet interconnected disciplines within the broader field of data management and analysis. Many statisticians, including Nate Silver, have argued that data science is not a new field, but rather another name for statistics. 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. However, the definition was still in flux. There is still no consensus on the definition of data science, and it is considered by some to be a buzzword. In 1962, John Tukey described a field he called "data analysis", which resembles modern data science. Big data is a related marketing term. Jeff Wu again suggested that statistics should be renamed data science. Moreover, both fields benefit from critical thinking and domain knowledge, as understanding the context and nuances of the data is essential for accurate analysis and modeling. Andrew Gelman of Columbia University has described statistics as a non-essential part of data science.