

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. For example, a data analyst might analyze sales data to identify trends in customer behavior and make recommendations for marketing strategies. Many statisticians, including Nate Silver, have argued that data science is not a new field, but rather another name for statistics. Data science, on the other hand, is a more complex and iterative process that involves working with larger, more complex datasets that often require advanced computational and statistical methods to analyze. The professional title of "data scientist" has been attributed to DJ Patil and Jeff Hammerbacher in 2008. In summary, data analysis and data science are distinct yet interconnected disciplines within the broader field of data management and analysis. In summary, data analysis and data science are distinct yet interconnected disciplines within the broader field of data management and analysis. It uses techniques and theories drawn from many fields within the context of mathematics, statistics, computer science, information science, and domain knowledge. Vasant Dhar writes that statistics emphasizes quantitative data and description. Data science is an interdisciplinary academic field that uses statistics, scientific computing, scientific methods, processes, algorithms and systems to extract or extrapolate knowledge and insights from noisy, structured, and unstructured data. In 1962, John Tukey described a field he called "data analysis", which resembles modern data science. In 1985, in a lecture given to the Chinese Academy of Sciences in Beijing, C. However, data science is different from computer science and information science. However, data science is different from computer science and information science. Despite these differences, data science and data analysis are closely related fields and often require similar skill sets. Andrew Gelman of Columbia University has described statistics as a non-essential part of data science. In 2012, technologists Thomas H. In 1998, Hayashi Chikio argued for data science as a new, interdisciplinary concept, with three aspects: data design, collection, and analysis. Vasant Dhar writes that statistics emphasizes quantitative data and description. Despite these differences, data science and data analysis are closely related fields and often require similar skill sets. He describes data science as an applied field growing out of traditional statistics. 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. Both fields play vital roles in leveraging the power of data to understand patterns, make informed decisions, and solve complex problems across various domains. 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.