In 1985, in a lecture given to the Chinese Academy of Sciences in Beijing, C. 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 also integrates domain knowledge from the underlying application domain (e.g., natural sciences, information technology, and medicine). 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. F. In 2012, technologists Thomas H. Data science and data analysis are both important disciplines in the field of data management and analysis, but they differ in several key ways. Data analysis typically involves working with smaller, structured datasets to answer specific questions or solve specific problems. 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. Big data is a related marketing term. In 1998, Hayashi Chikio argued for data science as a new, interdisciplinary concept, with three aspects: data design, collection, and analysis. Stanford professor David Donoho writes that data science is not distinguished from statistics by the size of datasets or use of computing and that many graduate programs misleadingly advertise their analytics and statistics training as the essence of a data-science program. However, data science is different from computer science and information science. 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. Others argue that data science is distinct from statistics because it focuses on problems and techniques unique to digital data. 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. 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. Data science and data analysis are both important disciplines in the field of data management and analysis, but they differ in several key ways. In 1962, John Tukey described a field he called "data analysis", which resembles modern data science. 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. 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. F. Jeff Wu used the term "data science" for the first time as an alternative name for statistics. Jeff Wu used the term "data science" for the first time as an alternative name for statistics. 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.