

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 2012, technologists Thomas H. Davenport and D.J. Patil reasoned that a new name would help statistics shed inaccurate stereotypes, such as being synonymous with accounting or limited to describing data. Data science is a "concept to unify statistics, data analysis, informatics, and their related methods" to "understand and analyze actual phenomena" with data. Jeff Wu used the term "data science" for the first time as an alternative name for statistics. 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. Many statisticians, including Nate Silver, have argued that data science is not a new field, but rather another name for statistics. After the 1985 lecture at the Chinese Academy of Sciences in Beijing, in 1997 C. Big data is a related marketing term. There is still no consensus on the definition of data science, and it is considered by some to be a buzzword. F. 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 science and data analysis are both important disciplines in the field of data management and analysis, but they differ in several key ways. Jeff Wu again suggested that statistics should be renamed data science. Cleveland. Data analysis typically involves working with smaller, structured datasets to answer specific questions or solve specific problems. It uses techniques and theories drawn from many fields within the context of mathematics, statistics, computer science, information science, and domain knowledge. 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. They work at the intersection of mathematics, computer science, and domain expertise to solve complex problems and uncover hidden patterns in large datasets. Andrew Gelman of Columbia University has described statistics as a non-essential part of data science. Many statisticians, including Nate Silver, have argued that data science is not a new field, but rather another name for statistics. F. Vasant Dhar writes that statistics emphasizes quantitative data and description.