

The professional title of "data scientist" has been attributed to DJ Patil and Jeff Hammerbacher in 2008. After the 1985 lecture at the Chinese Academy of Sciences in Beijing, in 1997 C. 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. After the 1985 lecture at the Chinese Academy of Sciences in Beijing, in 1997 C. Data scientists are often responsible for collecting and cleaning data, selecting appropriate analytical techniques, and deploying models in real-world scenarios. 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. 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. During the 1990s, popular terms for the process of finding patterns in datasets (which were increasingly large) included "knowledge discovery" and "data mining". The professional title of "data scientist" has been attributed to DJ Patil and Jeff Hammerbacher in 2008. 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. They work at the intersection of mathematics, computer science, and domain expertise to solve complex problems and uncover hidden patterns in large datasets. The term "data science" has been traced back to 1974, when Peter Naur proposed it as an alternative name to computer science. In addition to statistical analysis, data science often involves tasks such as data preprocessing, feature engineering, and model selection. F. Turing Award winner Jim Gray imagined data science as a "fourth paradigm" of science (empirical, theoretical, computational, and now data-driven) and asserted that "everything about science is changing because of the impact of information technology" and the data deluge. 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. Both fields play vital roles in leveraging the power of data to understand patterns, make informed decisions, and solve complex problems across various domains. Jeff Wu used the term "data science" for the first time as an alternative name for statistics. Vasant Dhar writes that statistics emphasizes quantitative data and description. Big data is a related marketing term. In 1962, John Tukey described a field he called "data analysis", which resembles modern data science. Data science is a "concept to unify statistics, data analysis, informatics, and their related methods" to "understand and analyze actual phenomena" with data. The professional title of "data scientist" has been attributed to DJ Patil and Jeff Hammerbacher in 2008. Despite these differences, data science and data analysis are closely related fields and often require similar skill sets. Though it was used by the National Science Board in their 2005 report "Long-Lived Digital Data Collections: Enabling Research and Education in the 21st Century", it referred broadly to any key role in managing a digital data collection.