

Data Science Lifecycle

Data Science is an interdisciplinary research field that requires the application of scientifically sound methods to extract patterns and insights from (un)structured, distributed and often dynamically changing data and to prepare them for further processing.

The Data Science Lifecycle includes key components from the fields of Data Engineering, Statistics, Data Analytics and Prediction, Big Data Technology, Visual Analytics, Artificial Intelligence and Machine Learning, among others. Furthermore, it also includes critical questioning of data quality and identification of ethical aspects in the Data Science process.

In the talk, the Data Science Lifecycle will be presented, looking at some steps of the cycle in detail. Special focus will be put on current research topics such as human in the loop, explainability and interpretability of machine learning approaches and visual analytics aspects.

