

Big data analytics and visualization



We work on creating visual and algorithmic tools to analyze and study large volumes of data, helping extract knowledge from complex sources and produce better informed decisions.

Summary

It's becoming increasingly clear that the real power in the big data revolution lies in the intelligence of the algorithms we use to extract information from them, and how their recommendations are presented to decision makers. The collective name for these algorithms is machine learning, although many of them are called artificial intelligence because they are inspired by our brains (artificial neural networks) or simply because their prediction ability is almost like that of an intelligent being.

Our focus is on applying machine learning and specially deep learning techniques to industrial and scientific problems with good data accesibility, combining it with other BSC capabilities in high performance simulation and with our team skills on data visualization. In this way, we are able to deliver a complete end-to-end data analytics and visualization service, capable of extracting insight from large and complex data coming from combined structured (e.g. simulations, sensors) or unstructured (free text, social media) sources and presenting it in the most useful manner.

Objectives

- Apply machine learning and deep learning techniques to industrial and scientific problems
- Develop visualization and analytics big data infrastructure
- Develop visual strategies for unique problems with complex requirements.
- Help industry transition into a new data-enabled era

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Source URL (retrieved on 18 Sep 2021 - 02:54): <https://www.bsc.es/es/research-development/research-areas/big-data/big-data-analytics-and-visualization>