DiSCourse Seminar

The Digital Science Center and the Department of Psychology would like to invite you to the following talk:

Roberto Viviani
University of Innsbruck

Using Large Language Models to Teach Statistics

In this seminar talk I will report on my experience in programming and using Large Language Models (LLMs, the AI of ChatGPT) in a statistics course at the Department of Psychology. We fed a chatbot the content and exercises that were being used in the class, so that students could access this content by asking questions or seek help in solving exercises. To do this, we programmed a Retrieval Augmented Generation (RAG) system. RAG is the simplest and best understood example of the 'application layer' of LLMs, the focus of most current startups and industry applications due to the expected large impact on the way we work. RAG also exemplifies two contrasting visions for LLMs: artificial general intelligence (as in ChatGPT), and as a language processing unit (not much talked about). This difference is key in appreciating how LLMs applications are engineered and how safety may be achieved in them. I will then briefly report on other attempts to use LLMs in teaching, a field where Google DeepMind, among others, is active. This will offer the opportunity to discuss what changes LLMs may introduce in teaching, how these changes may be shaped by the interests of different societal stakeholders, and the quest to develop the 'digital twin' of a lecturer.

About the speaker

Roberto Viviani is an associate professor at the Department of Psychology of the University of Innsbruck. As a researcher in the field of neuroimaging, he focuses on statistical aspects of neuroimaging data analysis. In this context, he boasts several years of experience in programming specialized statistical methods. Large Language Models and AI are also used in specific projects.

Date, Time, Place:
Friday, 11 April 2025, 12:00 (CEST), hybrid
Participants are invited to join the event at the Digital Science Center, Innrain 15, Open Space Area (1st floor) *or* online via Big Blue Button.