

Hauptseminar



Generative AI in Visualization

In recent years, Generative AI models have gained attention due to their ability to create various types of content, such as text (ChatGPT), images (Midjourney, Stable Diffusion), and audio. These models have also been proposed for integration into visualization research. For example, large language models (LLMs) are capable of generating code for programming visualization libraries. This seminar will delve into the applications of generative AI models in state-of-the-art visualization techniques. We will explore how different AI models can generate code for programming visualization libraries, generate content for data storytelling, and even aid in the creation of interactive visualizations.

Beyond showcasing these applications, our seminar will also delve into the implications of this research. How do generative models change the way we approach visualization? What new challenges and opportunities arise from combining Al-driven content with human design intuition and creativity?

Join us as we explore the possibilities and challenges presented by Generative AI in Visualization!

Target Group:

MSc Informatik/Softwaretechnik/Computer Science/Software Engineering/Artificial Intelligence and Data Science

Dates:

The seminar will be held weekly in the winter semester in person at V38. There will be no preliminary meeting.

Contact:

Prof. Daniel Weiskopf, Dr. Kuno Kurzhals

E-Mail: (Daniel.Weiskopf | Kuno.Kurzhals)@visus.uni-stuttgart.de



Figure 1: Different types of data visualization (and the prompts used to create them) as imagined by text-to-image generative models. Source: Schetinger et al. "Doom or Deliciousness: Challenges and Opportunitiesfor Visualization in the Age of Generative Models", Computer Graphics Forum, 2023