

zentrum für virtual reality und visualisierung forschungs-gmbh



## laden gemeinsam zum

## GASTVORTRAG

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"From Visual Exploration to Storytelling and Back Again"



## Abstract:

The primary goal of visual data exploration tools is to enable the discovery of new insights. To justify and reproduce insights, the discovery process needs to be documented and communicated. A common approach to documenting and presenting findings is to capture visualizations as images or videos. Images, however, are insufficient for telling the story of a visual discovery, as they lack full provenance information and context. Videos are difficult to produce and edit, particularly due to the non-linear nature of the exploratory process. Most importantly, however, neither approach provides the opportunity to return to any point in the exploration in order to review the state of the visualization in detail or to conduct additional analyses. In this talk, I will introduce CLUE (Capture, Label, Understand, Explain), a model that tightly integrates data exploration and presentation of discoveries. Based on provenance data captured during the exploration process, users can extract key steps, add annotations, and author 'Vistories', visual stories based on the history of the exploration. These Vistories can be shared for others to view, but also to retrace and extend the original analysis. I will also discuss how the CLUE approach can be integrated into visualization tools. Finally, I will also demonstrate the general applicability of the model in multiple usage scenarios, including an example from molecular biology that illustrates how Vistories could be used in scientific journals.

## **Biography:**

I am Assistant Professor at the Institute of Computer Graphics at Johannes Kepler University Linz. I finished my PhD at the Institute for Computer Graphics and Vision at Graz University of Technology in early 2011 and moved to Linz later that year. As part of my tenure-track position, I spent a part of the year 2012 as a visiting researcher at the Center for Biomedical Informatics (CBMI) at Harvard Medical School. In 2014 I received a Fulbright scholarship for research and lecturing at the Visual Computing Group at the Harvard School of Engineering and Applied Sciences. In 2016 I am teaching a data visualization course at the Imperial College Business School.

My scientific areas of interest include visualization, visual analytics, and biological data visualization, where I am particularly interested in the integrated analysis of large heterogeneous data.

Datum: Freitag 7. Oktober 2016, 10:30 Uhr s.t.

Ort: TU Wien, Favoritenstr. 9, Stiege 1, 5. Stock, Seminarraum E186