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# GASTVORTRAG

**Cagatay Turkey**

Applied Data Science, City University London

**“Seamless Computations for Interactive Data Analysis”****Abstract:**

The vision of integrating the best of automated computation and capabilities of the human has been a highly praised goal in visualization research and parallels the emergence of visual analytics as a field on its own. In visual analytics, the integration of automated and interactive methods is considered to be one of the main mechanisms to facilitate the construction of knowledge in data analysis. This integration can be done at different levels -- from static visualizations of computation results to giving user the interactive control on the inner workings of an algorithm.

One form of such integrations involve the "seamless" use of automated computational tools within interactive visual data analysis. These methods employ "task-oriented" computations whose results become natural elements of the interactive process. Such approaches are important to build more reliable and insightful visual-data-analysis routines and to foster the use of visual analytics by a wider audience. In this talk, I will provide a quick overview of the different types of integration in visual analysis and focus on the examples of using computational tools seamlessly. The talk will then move on to discuss opportunities and open issues with such approaches.

**Biography:**

Cagatay Turkey is a Lecturer in Applied Data Science at giCentre in the Computer Science Department at City University London. He has a PhD in visualization (University of Bergen, 2013), MSc. (Sabanci Uni., Istanbul, 2010), and BSc. (METU, Ankara, 2009) in Computer Science and served as a visiting research fellow at Harvard University in 2013. His research mainly focuses on the tight integration of interactive visualizations, data analysis techniques and supporting exploratory knowledge and capabilities of experts. He has a special interest in heterogeneous high-dimensional and temporal data from various fields such as biomedical informatics and demography. He serves as a programme-committee member and an active reviewer for conferences and journals in the field of visualization and computer graphics, such as IEEE VIS, EuroVis, and IEEE TVCG. He has a background in computer science, visualization and computer graphics.

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