

Call for Papers for a Special Issue on  
**Visual Game Analytics**  
<https://sivga.wordpress.com/>

Information Visualization journal (SAGE)

*Special Issue Editors:*

Günter Wallner (University of Applied Arts Vienna, Austria), [guenter.wallner@uni-ak.ac.at](mailto:guenter.wallner@uni-ak.ac.at)

Alessandro Canossa (Northeastern University, USA), [a.canossa@neu.edu](mailto:a.canossa@neu.edu)

Magy Seif El-Nasr (Northeastern University, USA), [m.seifel-nasr@neu.edu](mailto:m.seifel-nasr@neu.edu)

During the last decade game developers and researchers have started to extensively collect in-game data of players in order to guide decision-making. This has led to the emergence of the new field of game analytics, that is, data analytics in the context of games. Over the last years game analytics has considerably contributed to our understanding of player behavior. However, with the increase in volume and variety of data a need for effective data visualization has arisen to support the interpretation of the complex and multimodal data sets and to provide various stakeholders with actionable intelligence. Despite increased attention, data visualization for game analytics is still in its infancy and many challenges in visualizing in-game data remain. Among others, game data is high dimensional, including time and space as well as the virtual context when decisions are made. Thus there is much research looking into how to reduce the dimensionality or to build interactive visualizations systems to tackle this problem. On the other hand, stakeholders who would like to look at game data, usually have different needs and would like to see different level-of-details in their visualizations. This necessitates customization and interactive adaptive techniques. How to design such systems for effective knowledge discovery is thus still a challenge. The purpose of this special issue is to collect novel work on visualization techniques for game analytics in order to contribute to the current body of knowledge and advance the start-of-the-art of the field.

Moreover, research on gameplay visualization so far has largely focused on informing development while research on player-centric visualization remains surprisingly largely unexplored. However, with the growing popularity of online games and e-sports, access to in-game data has become an increasingly important aspect for many players, allowing them to assess and to improve their skills, to compare their performance with the global player community, or to discuss possible strategies. From a developer's point-of-view, providing players with access to in-game data, for example through APIs, can also improve community involvement and, in turn, increase the life-cycle of a game. As such this special issue explicitly also calls for work on visualizations targeted toward players in order to broaden our understanding of player-centric visualization.

**Topics of interest include but are not limited to:**

- Visualizations and visual analytics system for triangulating mixed data sources or multimodal data interpretation
- Approaches for inferring behavior from game telemetry data (understanding the ‘why’)
- Novel visualization techniques for sequence and time-based analysis of players’ execution traces
- Spatial, temporal, or spatio-temporal analysis methods
- Comparative and change visualization (e.g., to understand the consequences of design choices, to facilitate game balancing, ...)
- Case studies dealing with player behavior analysis and which make use of visualizations
- Evaluation of visualizations in the context of gameplay analysis (e.g., which types of visualizations are appropriate for which kind of tasks)

This special issue calls for papers that present novel approaches, methods and research findings and push the state-of-the-art in visual game analytics. As such we discourage submissions that describe applications or case studies of existing commercial tools. All submissions must be original and may not be under review by another publication. All submitted papers will be reviewed on a double-blind, peer review basis.

There are several publicly available data sets for use to visualize game action data. We are linking to a few well documented data sets that are available to public use, please see the dataset page on the accompanying website. Please visit respective websites for more information on how to download and use the datasets. These datasets are in no way compulsory for submission, but we encourage using them if applicable so that authors can have the ability to compare their work against one another.

**Important Dates:**

Submission deadline:	July 30, 2016
Reviews to authors:	November 30, 2016
Revised papers due:	January 30, 2017
Reviews to authors:	March 30, 2017
Final papers due:	May 2, 2017
Publication:	October, 2017

**Submission:**

Electronic submissions of manuscripts in PDF should be made using the online submission system and the papers should be formatted according to the journal standards. During the submission process please indicate ‘yes’ when asked if the submission is for a special issue and provide the special issue’s name: *Visual Game Analytics*. For details on the submission process, please visit the Journal's instruction website at: <http://ivi.sagepub.com/>

For additional inquiries and advice on the potential suitability of any proposed manuscripts please contact the guest editors.