

# CALL FOR CONTRIBUTIONS

## Data Analytics Applications in Gaming & Entertainment

<https://gdmbook.wordpress.com/>

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This is a call for contributions for the \*Data Analytics Applications in Gaming and Entertainment\* book to be published by CRC Press, Taylor & Francis Group in late 2018. The book is part of the Data Analytics Applications book series edited by Jay Liebowitz.

### OUTLINE

The last decade has witnessed the rise of big data in game development as the increasing proliferation of Internet-enabled gaming devices has made it easier than ever before to collect large amounts of player-related data. At the same time the emergence of new business models and the diversification of the player base have exposed a broader potential audience which attaches great importance to being able to tailor game experiences to a wide range of preferences and skill levels. This, in turn, has led to a growing interest in data mining techniques as they offer new opportunities for deriving actionable insights in order to inform game design, to ensure customer satisfaction, to maximize revenues, and to drive technical innovation.

This volume seeks to provide a comprehensive overview of data mining applications pertaining to all aspects of gaming and entertainment. It is intended to serve as a reference volume for academics and practitioners alike. The book will be structured along four main themes, covering different aspects of data mining in games. Possible topics of interest for each of the themes are listed below.

### IMPORTANT DATES

July 31, 2017	Deadline for chapter proposals
September 15, 2017	Notification of proposal acceptance
January 30, 2018	Draft chapters due
April 15, 2018	Editorial feedback and comments from reviewers returned to authors
May 30, 2018	Revised chapters due
July, 15, 2018	All chapters send to publisher

## THEMES AND TOPICS OF INTEREST

### **Introductory chapters to game data mining**

Introductory chapters aimed at explaining common techniques used in the context of game data mining and data-driven game development. For example, overview chapters explaining data mining techniques such as clustering methods or pattern mining and their application in the gaming domain.

### **Data mining for games user research**

Contributions pertaining to issues related to games analytics and directed towards understanding player behavior and informing games user research. Topics of interest include, among others, player profiling and modeling, behavioral analysis, understanding player communities and social structures, churn prediction and retention analysis, balancing of in-game economies, or monetization.

### **Data mining for game technology**

Contributions concerning technical aspects of game development which make use of large-scale datasets such as data-driven approaches to game AI, dynamic difficulty adjustment, and procedural content or level generation.

### **Visualization of large-scale game data**

Contributions dealing with the visualization of in-game data for the purpose of exploration, analysis, knowledge discovery, and communication. This includes, but is not limited to spatio-temporal visualization approaches, multi-modal data visualization, visual analytics tools, and time-based visualizations.

This list is meant to be suggestive, not exhaustive. If you have any suggestion for an interesting chapter not covered here please get in touch.

## CONTRIBUTION FORMATS

**Research articles** covering all aspects of data mining in gaming or entertainment. Such chapters may describe novel approaches, methods, or research findings. Chapters reviewing common techniques or discussing the state-of-the-art in game data mining are also within the scope of the book.

**Case studies** describing the application of data-mining technique in practical settings. We especially welcome case studies from industry experts. Case studies may cover one or multiple themes. For example, case studies may describe best practices or lessons learned, e.g., by highlighting what went right and wrong in data-driven game development (such as, for example, Gamasutra style post-mortems).

## PROPOSAL SUBMISSION

Proposals should not exceed 600 words and should include a tentative title, a short description/outline of the chapter, author names, affiliations and a brief biography. Submission should be previously unpublished and should not be under consideration for publication elsewhere. Please send your proposals via e-mail to [guenter.wallner@uni-ak.ac.at](mailto:guenter.wallner@uni-ak.ac.at). Deadline for submission of chapter proposals is July 31th 2017\* although early submissions are encouraged.

The final chapter should be around 20-25 double-spaced pages (incl. figures and tables). Templates for formatting the chapter itself will be provided in due time.

Proposals will be used to evaluate if the proposed chapter fits the topic of the book. All accepted chapters will then undergo a double-blind review process. For additional inquiries and advice on the potential suitability of any proposed chapter please e-mail me at [guenter.wallner@uni-ak.ac.at](mailto:guenter.wallner@uni-ak.ac.at).

**Editor:** Guenter Wallner (University of Applied Arts, Vienna, Austria)  
**Publisher:** CRC Press, Taylor & Francis Group  
**Website:** Further details can be found at <https://gdmbook.wordpress.com/>

*Please feel free to forward this call to any colleagues that you feel may be interested.*