## Call for Papers for a Special Session on

# Game Data Science (GDS 2016)

## Aims and Scope

In the past years, both traditional video game platforms and emerging mobile games have tended to become always connected to the Internet. This allows game developers to collect a huge amount of data in real time while maintaining an active relationship with the players. This recent revolution of the video-game industry creates a broad range of new challenges for both research and business applications. The current trend to include social features and in-app purchases to games, combined with the exceptional level of granularity of the data collected makes game datasets a unique source of information to observe and analyze human behavior, including social and consumer dynamics.

It is paramount that research efforts focus on the development of adequate statistical and learning methods able to model and predict player behavior, that scale to big datasets and allow an intuitive visualization of the results.

In this special session on Game Data Science we aim to bring together experts from research and industry, providing a stimulating atmosphere to promote collaborations and mutual exchange. The goal of the GDS session is to gather outstanding contributions, pursuing the development and application of new technologies towards a new paradigm in video-games. This special session calls for work on data science that help to understand and predict player behavior, addressing this challenge from three points of view: the statistical/machine learning methodology, visualization analysis and data science product deployment.

### **Topics of Interest**

Machine learning applied to game data

- Advanced methods
- Dimensionality reduction and feature extraction
- Modeling of the player behavior and social interactions
- Churn prediction
- Forecast of time series of player activity
- Forecast of the impact of game and marketing events on player behavior
- Clustering of player profiles and activity
- Virality models

Deployment of game data science in products

- Big data architecture challenges
- Novel algorithms that scale with big datasets

- A/B testing of game data science features
- Visualizations and visual analytics
- Novel visualization techniques for time-series analysis
- Game data science product management
- Game data science applied to game development

## **Special Session Website**

http://gamedatascience.org/

#### Submission

https://easychair.org/conferences/?conf=dsaa2016

When you submit a paper, select the track "Special session".

Accepted special session submissions will be published by IEEE and included into the IEEE Xplore Digital Library.

### **Important Dates**

Paper Submission deadline: 20 May, 2016, 11:59 PM PDT

Notification of acceptance: 15 July, 2016

Final Camera-ready papers due: 19 August, 2016

Conference: 17-19 October, 2016

#### Chairs

Alain Saas, Silicon Studio (Japan) - alain@gamedatascience.org

Africa Perianez, Silicon Studio (Japan) - africa@gamedatascience.org

#### **Committee Members**

To Be Confirmed

Alessandro Canossa, Northeastern University (USA)

Thomas Debeauvais, University of California Irvine (USA)

Benjamin Devienne, Gameloft (Canada)

Anders Drachen, Aalborg University (Denmark)

Dan Dumitru, Supercell (USA)

Austin Frank, Riot Games (USA)

**Alexandru Iosup**, Delft University of Technology (Netherlands)

**Kristian Kersting**, University of Dortmund (Germany)

Kirsti Laurila, Rovio Entertainment Ltd. (Finland)

Julian Runge, Wooga (Germany) and Humboldt University of Berlin (Germany)

Rafet Sifa, Fraunhofer IAIS (Germany)

Ben Weber, Electronic Arts (USA)