

CALL FOR PAPERS

Paper Submission Deadline: March 24, 2020

The 2020 (16th) International Conference on Data Science (ICDATA)

https://icdata.org

July 27-30, 2020, Luxor (MGM), Las Vegas, USA Part of CSCE'20

https://www.americancse.org/events/csce2020

Call for Papers

Special Session on e-Sports and Sports Analytics

Organizers:

Ulf Johansson, Jönköping University, Sweden, ulf.johansson@ju.se

Gary M. Weiss, Fordham University, NY, USA, gaweiss@fordham.edu

Thematic Calls:

Today, analytical and data-driven approaches to understanding sports are used increasingly by teams, managers, coaches and scouts. In baseball, it is fair to say that these methods have even revolutionized the understanding of the game itself. Consequently, all major franchises in baseball operate analytical departments, and base many decisions on recommendations from these departments. Sports like soccer and ice hockey, on the other hand, lag behind, in part because of the inherent difficulty in analyzing sports with continuous play.

In the last decade, the interest in so-called e-sports, based on computer games, have increased rapidly. Professional players and teams have emerged for games such as Counter-Strike, Defense of the Ancients (DOTA) 2, League of Legends and Hearthstone. Tournaments now offer substantial sums of prize money and are attracting large audiences when broadcast. Many topics from traditional sports analytics, e.g., strategy analysis, opponent modeling and match forecasting, apply to e-sports. Furthermore, by their very nature, e-sports can easily capture the highly detailed data that is critical for analysis. In fact, e-sport data sets are beginning to be released publicly (e.g., "League of Legends" data on Kaggle). As a result, we are beginning to see an increase in the application of analytics to e-sports. Because of the emergence and increasing importance of e-sports, this special session equally focuses on traditional and e-sports analytics.

This special session solicits high-quality papers covering both predictive and descriptive machine learning, data mining, statistics, and related approaches to Sports Analytics. Topics of interest include, but are not limited to, the following:

- Analyzing positional data (tracking)
- Advanced metrics, e.g., xG and its derivatives
- Player valuation and scouting
- Player performance management and prediction
- Match outcome and league table prediction
- Analysis of match strategy and tactics
- Sports betting
- Development of competitive AI agents for e-sports

<u>Submission:</u> All manuscripts should be submitted via the standard online submission process for ICDATA conference. Please have a look at the <u>ICDATA website</u> and in particular at the info on submissions. During the submission process, please select the track: 'eSSA - Special Session on e-Sports and Sports Analytics'.

<u>Publication:</u> All accepted papers will be published by Springer Nature - Book Series: Transactions on Computational Science & Computational Intelligence, https://www.springer.com/series/11769

<u>Date and Venue</u>: The special session will be held at the ICDATA'20, July 27–30, 2020 at the Luxor (MGM) in Las Vegas, Nevada, USA.

<u>Questions:</u> In case of further questions or assistance, please contact the special session organizers via <u>ulf.johansson@ju.se</u> and <u>gaweiss@fordham.edu</u>.