EGG 2014: Exploration on Games and Gamers - Introduction

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1 Introduction

With the remarkable advances from isolated console games to massively multiplayer online role-playing games, the online gaming world has become invaluable assets for the research of social dynamics [7]. Online game players interact with each other in various ways, as they do in the real world. More importantly, interactions could be easily quantified and logged in detail. The huge volume of behavioral data collected from online games helps researchers study human nature in an unprecedented scale. For instance, Szell et al. observe six different types of in-game interaction (e.g., friendship, communication, trade, enmity, aggression, and punishment) and analyze the inter-dependence of social networks based on each type [12]. Their rich modeling of human society demonstrates competitive advantage of user behavior data collected in online games.

Considering the time and financial investment people put into games, the research community has shown increasing interest in studying games from a variety of perspectives. Studying video games as a scientific endeavor can have huge impact for the industry. Quantification and empirical evidence can inform game developers on design decisions, aid in the advancement of gaming technology, and provide new insight into the minds of gamers.

There are also important social problems facing gaming. Consider unethical actions such as toxic behavior and cheating. Due to the reliance of social interactions in multiplayer games, both of these issues threaten the community of gamers [1,2,4,11]. As expected from controlled laboratory experiments and intuition, cheating has been shown to display contagious properties, where the behavior will spread from friend to friend. Toxic behavior, which is violations of social norms to cause harm to individuals and the larger community, has only recently begun to be understood. A deeper understanding of bad behavior in online games could lead to detection and mitigation strategies, and can have

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impact on the understanding of other forms of bad behavior, such as contraband networks [5] or even cyberbullying.

2 Scope of Workshop

At the Exploration on Game and Gamers workshop, we welcome interdisciplinary research related to a deeper understanding of games and gamers. We desire both quantitative and qualitative work on social interactions in online games. For example, analysis on and systems support for social interactions and how they influence, and are influenced by, gameplay. We are also particularly interested in work related to eSports, for example new metrics for player performance and matchmaking algorithms, as they remain relatively unexplored and are a focal point for worldwide player interactions. Regardless of the specifics, we believe the papers presented at this workshop can provide a wealth of knowledge for researchers studying not only games, but online social systems in general.

We invited research on qualitative and quantitative analysis of games and gamer behavior, as well as systems to support such analysis from both academia and industry.

Topics of interest included:

- Understanding, detecting, and mitigating extreme and unethical behavior in online games.
- Big data systems for efficient storage and processing of gaming related data.
- Diffusion of optimal strategies from higher skill players to lower skill players.
- Improvements in matchmaking algorithms.
- Methods for annotating subjective events in eSports (e.g., successful fight initiations).
- Extrinsic rewards and intrinsic motivation in social games.
- The relationship between the roles players take in-game and personality.
- Methods for providing sensitive data for 3rd party analysis.
- Analysis of virtual goods economies, both things like MMO economies as well as out of band markets like the Steam Trading platform.
- Community/user generated content and relationships to game popularity, longevity, etc.
- Improvements to player tutorials.

3 Program Committee

The program committee for EGG 2014 was composed of a set of industry and academic experts on video games responsible for both ground breaking research as well as major commercial successes:

- Christian Bauckhage, B-IT institute of the University of Bonn
- Alessandro Canossa, Northeastern University
- Alexandru Iosup, Delft University of Technology

- Brian Keegan, Northeastern University
- Jina Lee, NC Soft
- Jiyoun Lim, ETRI
- Nick Lim, Sonamine
- Juyong Park, KAIST
- Cuihua (Cindy) Shen, University of California, Davis
- Kyong Jin Shim, Singapore Management University
- John Simon, 5rocks
- Michael Szell, MIT
- Ji Young Woo, Korea University

4 Submissions and Acceptance

EGG 2014 received 7 submissions, representing authors from 7 countries and 9 institutions. Of the 7 submissions, 3 were short papers and 4 were full length papers. Each paper received a minimum of 3 reviews. In the end, 6 submissions (2 short, 4 full length) were accepted. The accepted papers represented research on interaction methods for mobile games [3], the spread of altruistic behavior in massively multiplayer online games [13], context sensitive match making [8], linguisitc analysis of toxic players [6], the ways in which players receive help in games [9], and analysis of the social structure of high-skill players [10].

References

1. Blackburn, J., Kourtellis, N., Skvoretz, J., Ripeanu, M., Iamnitchi, A.: Cheating in Online Games: A Social Network Perspective. ACM Transactions on Internet Technology **3**(9), May 2014
2. Blackburn, J., Kwak, H.: STFU NOOB!: Predicting crowdsourced decisions on toxic behavior in online games. In Proceedings of the 23rd International Conference on World Wide Web, WWW 2014, pp. 877–888 (2014)
3. Bock, M., Fisker, M., Fischer Topp, K., Kraus, M.: Initial exploration of the use of specific tangible widgets for tablet games. In: Proceedings of the 1st Exploration on Games and Gamers Workshop, EGG 2014 (2014)
4. Kang, A.R., Jiyoung, W., Park, J., Kim, H.K.: Online game bot detection based on party-play log analysis. Computers & Mathematics with Applications **65**(9), 1384–1395 (2013)
5. Keegan, B., Ahmed, M.A., Williams, D., Srivastava, J., Contractor, N.: Sic transit gloria mundi virtuali?: promise and peril in the computational social science of clandestine organizing. In: WebSci (2011)
6. Kwak, H., Blackburn, J.: Linguistic analysis of toxic behavior in an online video game. In: Proceedings of the 1st Exploration on Games and Gamers Workshop, EGG 2014 (2014)
7. Lazer, D., Pentland, A., Adamic, L., Aral, S., Barabasi, A.L., Brewer, D., Christakis, N., Contractor, N., Fowler, J., Gutmann, M., Jebara, T., King, G., Macy, M., Roy, D., Van Alstyne, M.: Life in the network: the coming age of computational social science. Science **323**(5915), 721–723 (2009)

8. Mylak, M., Deja, D.: Developing game-structure sensitive matchmaking system for massive-multiplayer online games. In: Proceedings of the 1st Exploration on Games and Gamers Workshop, EGG 2014 (2014)
9. Okopny, P., Musabirov, I., Alexandrov, D.: Informal in-game help practices in massive multiplayer online games. In: Proceedings of the 1st Exploration on Games and Gamers Workshop, EGG 2014 (2014)
10. Park, H., Kim, K.J.: Social network analysis of high-level players in multiplayer online battle arena game. In: Proceedings of the 1st Exploration on Games and Gamers Workshop, EGG 2014 (2014)
11. Shores, K.B., He, Y., Swanenburg, K.L., Kraut, R., Riedl, J.: The identification of deviance and its impact on retention in a multiplayer game. In: Proceedings of the 17th ACM Conference on Computer Supported Cooperative Work & Social Computing, CSCW 2014, pp. 1356–1365. ACM (2014)
12. Szell, M., Thurner, S.: Measuring social dynamics in a massive multiplayer online game. Social Networks **32**(4), 313–329 (2010)
13. Woo, J., Kwak, B.I., Lim, J., Kim, H.K.: Generosity as social contagion in virtual community. In: Proceedings of the 1st Exploration on Games and Gamers Workshop, EGG 2014 (2014)