

## Gamification

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Gamification broadly refers to technological, economic, cultural, and societal developments in which reality is becoming more gameful either by design or as an emergent transformation (Hamari, 2019).

Gamification has become a prominent vein of research globally as well as in HICSS itself after the publication of a popular review by Juho Hamari, Jonna Koivisto and Harri Sarsa in 2014 that reviewed the then extant seeding empirical corpus of gamification (extended and updated version: Koivisto & Hamari, 2019). Gamification minitrack, since its inception in HICSS 2016, has thus cemented itself as one of the largest minitracks and topics of the conference. The Gamification minitrack attracts research papers from a vast array of perspectives, and therefore, unites many of the different veins of research appearing throughout the HICSS conference such as computing, media, information systems, education, management, business, education, and governance.

In 2023, the minitrack received 12 submissions out of which 6 papers were accepted. While the accepted papers this year deal with a variety of areas where gamification is applied, such as crowdsourcing, design, education, cybersecurity, computer science and mental health, they can be seen to fall under two thematic sessions. The first is related to 1) Ethical, mindful, and personalized design – be it about understanding the effects of personalization in crowdsourcing, unethical considerations in gamification design or the gamification of mindfulness, and 2) *Gamification in education* – be it in relation to learning in virtual lab environments, learner differences, or computer science education.

### References

Hamari, J. (2019). Gamification. In G. Ritzer & C. Rojek (Eds.), *The Blackwell Encyclopedia of Sociology*. New York John Wiley & Sons, 2019.

Koivisto, J., & Hamari, J. (2019). The rise of motivational information systems: A review of gamification research, *International Journal of Information Management*, 45, 2019, 191-210.

### Gamification mini-track at HICSS 2023

#### Session 1: Ethical, mindful, and personalized gamification

*Unethical Gamification: A Literature Review* by Samaan Al-Msallam, Nannan Xi, Juho Hamari

*Be Mindful of User Preferences: An Explorative Study on Game Design Elements in Mindfulness Applications* by Shanshan Hu, Aylin Usta, Manuel Schmidt-Kraepelin, Simon Warsinsky, Scott Thiebes, Ali Sunyaev

*Is adaptive gamification just a theoretical fairytale? An experiment in a text-based adventure game for data crowdsourcing* by Mareike Weber, Marc Riar, Benedikt Morschheuser

#### Session 2: Gamification in education

*Contextualizing Gamification Design: Using Extended Achievement Goal Theory to Understand College Learner Differences* by Jian Tang, Ping Zhang, Eunmi (Ellie) Jeong

*Best of Both Worlds: The Inclusion of Gamification in Virtual Lab Environments to Increase Educational Value* by Forough Nasirpour, Shadbad, Gabriel Bahr, Andy Luse, Bryan Hammer

*Assessing User Experiences with ZORQ: A Gamification Framework for Computer Science Education* by Sherri Weitz-Harms, Adam Spanier, John Hastings, Matthew Rokusek