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ISBN: 978-1-4503-7774-4
It is our great pleasure to welcome you to the 23rd International Academic Mindtrek Conference and the Mindtrek Conference, 29-30 January 2020. The COSS Association hosts Mindtrek as an annual conference, where Academic Mindtrek has been a part of a unique set of events comprising competitions, world famous keynote speakers, plenary sessions, media festivals, and workshops since 1997.

The International Academic Mindtrek is a meeting place where researchers, experts and thinkers present results from their latest work regarding the development of novel technology, media and digital culture for the society of tomorrow.

This edition of the conference was organized by the COSS Association in collaboration with Tampere University (TAU). The conference attracted a total amount of 45 submissions representing 14 countries.

This year the submission categories covered full papers, posters, workshops and demos. The scientific part of the conference is organized in co-operation with ACM SIGMM, and ACM SIGCHI. The conference proceedings are published in the ACM Digital Library.

A total of 45 submissions underwent a double-blind review and only the top-ranked submissions were invited for an oral presentation during the main conference tracks. From all 45 submissions, we have accepted 16 full papers, 6 posters and 2 workshops. We are happy to have these presentations during the different sessions of the International Academic Mindtrek Conference 2020.

We gladly bring some fresh topics for discussion in this year’s conference and we hope you will enjoy exploring new ideas during this event and that you have a joyful time during Academic Mindtrek 2020.

More information about the International Academic Mindtrek Conference can be found on the conference website: www.mindtrek.org/2020/academic.
We would like to especially thank our distinguished, international programme committee for their effort and valuable input during the reviewing process, namely:

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Markku Turunen is a professor of Interactive Technology. He is the leader of the Pervasive Interaction research group from Tampere University, where he has worked since 1998. His fields of expertise are: novel interaction techniques; software architectures for interactive systems; pervasive applications, interfaces for people with special needs; interactive solutions for industrial settings; UX of multimodal interaction, virtual-, augmented- and mixed-reality interfaces; ICT4D and HCI4D; ecologically-valid evaluation methods (showrooms, living labs, and long-term pilot studies) with representative user groups and commercialization of research results. He has more than 200 publications on these subjects. Markku is leading the international M.Sc. programme on Human-Technology Interaction and he is a co-founder and CEO of Multisense Oy, which specializes in novel interactive solutions. He has been the Academic Mindtrek Conference Chair since 2015.

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Juho Hamari is a Professor of gamification and leads the Gamification Group at Tampere University. Dr. Hamari can be considered an extremely prominent scholar for his age (PhD in 2015). His work has been cited ~14,000 times in the last 5 years, he has an h-index of 42. He has over 120 articles. He has been named as the “Young Researcher of The Year” by Finnish Foundation for Technology Promotion, “Outstanding Young Person in Finland” by JCI, “Information Systems Scholar of The Year” by Tietojenkäsittelytieteiden Seura, “Researcher of The Year 2018” by UC Pori and “Emerging virtual scholar” by the American Educational Research Association (AERA). His research has been featured e.g. on the list of most notable articles in computer science by the ACM and he has received several awards for scientific productivity. He holds editorial positions in several Q1 journals.

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Nannan Xi is a post-doctoral researcher in Gamification Group at the Tampere University, Finland. She received her Ph.D. degree in Marketing Management from Zhongnan University of Economics and Law. Her doctoral thesis focused on gamification, customer engagement and brand management. She has been working in various research projects at Tampere University concentrating on gamification, mixed reality, wearable technologies and retailing. Main research areas: New media marketing, Gamification, E-commerce and Mixed reality.

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Mikko Salminen, PhD (psychology) works as a postdoctoral researcher at the Tampere University, Gamification Group. His current research focuses to the emotions and social interaction in digital environments and in organisations. Previously he has studied, for example, digital games, VR, human-computer interaction, decision making, and leadership. In his research he has utilised quantitative methods, especially psychophysiology, and has also studied and developed bio-adaptive systems.

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Joseph Macey is a Doctoral Researcher at the Tampere University and has been a member of the Gamification Group since 2016. His doctoral thesis concerns the relationships between videogames, esports, and gambling. He has published several of the first empirical works to address the emergent practices of video game-related gambling and is a leading expert in the field: he has been a regular advisor to the Finnish Gambling Administration as well as having been invited to give keynote presentations at the Gambling Regulators of Europe Forum 2018, and the European Lotteries Association 2020.

His wider research interests include digital economies and virtual items, problematic behaviours associated with digital media consumption, adverse online behaviours, and cognitive biases of media users. He has conducted a research visit to the University of Nevada Las Vegas and has also been an organising member of several international conferences and seminars.

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