



Special Track on

Games and Entertainment

Games are an integral part of the human experience. Starting in our childhood and continuing throughout our lives they teach us about the world through the concepts of rules, strategies, and outcomes. They help prepare us for our future, provide entertainment, bring us together socially, and give us characters to root for — making ordinary people heroes for a moment. Digital games build on centuries of play and interaction bringing to the modern age a unique and creative form. Fully integrated into modern life, the video game industry now rivals that of the motion picture and music industries and their products are fully integrated into our digital lifestyles.

Computers with advanced graphics capabilities have contributed to the immersive interactive experience that attracts many to spend as much of their leisure time playing video games as watching television or listening to music. However, the artificial intelligence behind games and our understanding of knowledge usage in these interactive worlds has remained relatively undeveloped compared to the other advances in this domain. With the advancement of console and computer systems towards more computational power, specialized processing units, and multiple core CPUs, along with the maturing of graphics capabilities, game developers are dedicating more time and CPU cycles to game artificial intelligence in the next generation of interactive games. Efficient theories, techniques, and tricks that improve the intelligence of games, adversaries, allies, and the overall interactive experience are in great demand.

This track focuses on the latest artificial intelligence research in the area of games and entertainment technologies. Ranging from theory to application, from board games to immersive computer games to alternate reality games, from software toys to training simulations, we seek to highlight contributions that will improve the state of game AI and provide a glimpse into the future of games and entertainment.