

Title:

Complex Collective Systems

Abstract:

The topic of the presentation will be collective aspects of complex systems. Some specific models of complex systems will be presented such as: crowds, skiers, vehicle traffic in an urban environment and autonomous vehicle traffic. These models are applied and developed within our international projects and cover practical aspects of collective intelligence (intelligent particles, issues of discretization, sensor fusion etc.).

Biogram:

Jarosław Wąs - professor of technical sciences in the discipline of computer science - specialization: artificial intelligence and computational intelligence. He serves as a director of the Applied Computer Science department of AGH University of Kraków. He is interested in modeling and simulation of complex systems. In particular, his area of interest is data-driven modeling and the use of the agent-based modeling paradigm. He is interested in the applications of advanced algorithms and artificial intelligence in engineering, as well as in areas such as IoT, ambient intelligence and computational intelligence. To date, he has supervised 5 PhDs in Computer Science and AI.