O_HAI ④ Games – Kick off Meeting - Agenda

Date and location: 21.02.2020. Varaždin, Faculty of Organization and Informatics, Building 1, Faculty Council Chamber (Vijećnica), 2nd Floor

09:00 – 10:30 – Kick-off meeting (project presentation, introduction of research team members, project management & procedures)

10:30 – 10:45 – Coffee break

10:45 – 13:00 – Workshop (discussion on scientific and technology related challanges, system architecture design, 1st year publishing plan)

13:00 – 14:30 – Organized lunch

Project abstract: Hybrid artificial intelligence methods, which can be defined as the orchestration of complementary heterogeneous both symbolic and statistical AI methods to acquire more precise results, are omnipresent in contemporary scientific literature. Still, the methodology of developing such systems is in most cases ad-hoc and depends from project to project. Computer games have always been connected to the development of AI. From the earliest chess minmax algorithm by Claude Shannon in 1949 to the more recent AlphaGo in 2015, computer games provide an ideal testing environment for AI methods. Similarly, AI has always been an important part of computer games, which have often been judged by the quality of their AI and praised if they used an innovative approach. Computer games allow us to test AI methods, not only for fun and leisure, but also for numerous other fields of human activity through the fields of serious games and gamification. The project proposes to establish an new framework for the orchestration of hybrid artificial intelligence methods with a special application to computer games. Therefore an ontology of hybrid AI methods as well as a meta-model shall be developed that would allow for creating models (ensembles) of hybrid AI methods. This meta-model would be implemented into a modular distributed orchestration platform which would be further enriched with a number of modules to be tested in four gaming related environments: (1) MMORPG games, (2) gamified learning platform, (3) serious game related to autonomous vehicles and (4) a game for a holographic/volumetric gaming console which would also be developed during the project.