

In this thesis, a model based on the continuous-time Markov process is built and implemented and later applied on an one chosen collective game. An extensive analysis of available data is carried out to build a regression model to estimate parameters of the game model. An usability of the game model is shown by a simulation process. Pros and cons are evaluated in a comparison analysis against the application of the discrete-time Markov chains, how it was described in my bachelor thesis [Roman Zákutný (2007)]. In conclusion are discussed possible extensions for other collective games.