



## Final project proposal

<b>Type</b>	Master/Undergraduate	
<b>Title</b>	Game Theory on Networks	
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<b>Department / Group</b>		
Institute of Intelligent Systems		
<b>Topic(s)</b>		
Game Theory; Complex Networks		
<b>Project can start from</b>	01.04.2014	
<b>Project duration</b>	4 months	
<b>Short description</b>		
<p>The complex networks theory is one that has seen an exploding interest in the last almost two decades. Game theory has longer history, where at center of its study were either pair-wise interactions of individuals or those where all agents participated in the game. The real world interactions involve nontrivial number of individuals, and vary from one situation to another – the topology of interactions is a complex network. The focus of research in this project is a study of different strategies and outcomes of the games played by the agents with their neighbors within a network of agents. The analysis will be based on computational model of the networks and the game(s). Search of possible equilibrium and/or optimal strategies is the ultimate goal of this project.</p>		
<b>Results and assessment</b>		
<p>Student is expected to make a computational model of the network and the game. Written report about the game outcomes and possible equilibria and optimal strategies is the summary of the study. It is a mark for completion of the student's work.</p>		
<b>Other (additional) information</b>		
None.		