Computer Science Seminar

The Use of Frequent Subgraph Mining to Develop a Recommender System for Playing Real-Time Strategy Games

Isam Alobaidi, Missouri S&T

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209 Computer Science Building



Machine learning and computational intelligence have facilitated the development of recommendation systems for a broad range of domains. Such recommendations are based on contextual information that is explicitly provided or pervasively collected. Recommendation systems often improve decision-making or increase the efficacy of a task. Real-time strategy (RTS) games are one domain where computationally determined recommendations for moves that a player should, and should not, make can provide a competitive advantage. The goal of our research is to develop an accurate predictive recommendation system for multiplayer strategic games that is based on frequent subgraph mining. Herein we present that approach and validate it using the historical data of one RTS game.

Bio: In July 2001, Isam received his B.S. in Software Engineering from Al-Mansour University College, Iraq. He subsequently earned his Higher Diploma degree in Software Engineering from the Iraqi Commission for Computers and Information - Institute of Higher Studies in Informatics, Iraq in 2002. He began his graduate study towards the Master's degree in the Department of Computer Science at the Missouri University of Science and Technology, USA, where he received the degree in December 2015. After graduation directly, he began working towards a Ph.D. at the same university, as well as in computer science with a concentration of Data Mining. During his time as a student, he has worked as a graduate teaching assistant within his department as well as a graduate teaching assistant and grader within the Electrical and Computer Engineering department. He has previously worked as an IT Asset Management at Missouri University of science and technology.

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