MS Project Defense Announcement

Title: Development of a Bayesian Belief Network as a Generic Query Tool for the National Crime Victimization Survey

MS in Engineering Candidate: Mr. Michael Riesen
Advisor: Dr. Gursel Serpen, Elect Eng & Comp Sci
Committee Member: Dr. Kami Makki, Elect Eng & Comp Sci
Committee Member: Ms. Gaby Davis, Law School

October 24, 2007 @ 2:30pm

University of Toledo College of Law
Room 1011

This research project strives to achieve a set of interrelated goals: a probabilistic query software tool development for, automatic formulation of queries on victimization through, and knowledge extraction through rule mining from the NCVS dataset. A Bayesian Belief Network model that approximates the joint probability distribution of the set of attributes entailed by the NCVS dataset has been developed through a machine learning software tool, WEKA. The Bayesian Belief Network model of the NCVS data was implemented using the JavaBayes software tool to facilitate querying for any subset of the attributes included in the NCVS dataset. The Java-based query tool paves the way for the information inherent within the NCVS dataset to be readily accessible to the public at large providing an extremely easy interface for soliciting likelihood knowledge that is insightful and informative.

All interested persons are invited.