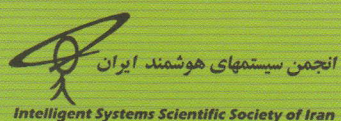


Abstracts

15-17 July 2009
Yazd University - Yazd - Iran

سومین کنگره مشترک سیستم‌های فازی و هوشمند 3rd Joint Congress on Fuzzy and Intelligent Systems



انجمن سیستم‌های هوشمند ایران
Intelligent Systems Scientific Society of Iran



دانشگاه یزد

سومین کنگره مشترک سیستم‌های فازی و هوشمند
3rd Joint Congress on Fuzzy and Intelligent Systems

انجمن سیستم‌های فازی ایران

A New Approach of Node Assignment in Bayesian Networks Using in Data Mining

Neda Abdollahi
Azad University of Zanjan
Abdollahi_neda@yahoo.com

Ali Reza Khanteymoori
Amirkabir University
khanteymoori@aut.ac.ir

Abstract: The Naive Bayesian (NB) classifiers have been one of the most popular techniques as basis of many classification applications both theoretically and practically and their use for classification has received considerable attention. But a mismatch between the objective function used such as likelihood or a function thereof and the goal of classification to maximize likelihood lead to poor performance when the Bayesian network learned in the standard way. In this paper we try to find the best assignment of random variables to nodes in a Bayesian network (BN) with a given topology. The next stage is formulating the likelihood functions and describing the methods for their maximization. And at the end the result of using the introduced method are reported.

Keywords: Bayesian Network, Maximum Likelihood, Naive Bayesian Classifiers.

A GA-based Fuzzy Mining Algorithm Using Selection Pressure Technique For Extracting Membership Functions

Z. Davarzani
Ferdowsi University of Mashhad
Department of computer
Engineering
zo.davarzani@stu-mail.um.ac.ir

M. Kadkhoda
Ferdowsi University of Mashhad
Department of computer
Engineering
mkadkhoda@birjand.ac.ir

M.-R. Akbarzadeh-T.
Ferdowsi University of Mashhad
Department of Electrical
Engineering
akbarzadeh@ieee.org

Abstract: Extracting association rules from transaction data is one of the most important purposes of data mining. In this paper, an enhanced Genetic- Fuzzy algorithm to derive membership functions dynamically from quantitative transaction data has been proposed. In this approach, selection pressure technique is used to adjust membership functions and fuzzify transaction data. Some experiments are also made to compare the proposed algorithm and existing approach. The results showed that the efficiency of proposed algorithm is better than the existing one.

Keywords: Data Mining, Membership Function, Association Rule, Genetic Algorithm, Fuzzy Set.

Ranking Fuzzy Numbers Based on Lexicographical Ordering

B. Farhadinia
Dept. Math., University of Mohaghegh Ardabili, Ardabil, Iran
farhadinia@uma.ac.ir

Abstract: Although, so far, many methods for ranking fuzzy numbers have been discussed broadly, most of them contained some shortcomings, such as requirement of complicated calculations, inconsistency with human intuition and indiscrimination. The motivation of this study is to develop a model for ranking fuzzy numbers based on the lexicographical ordering which provides decision-