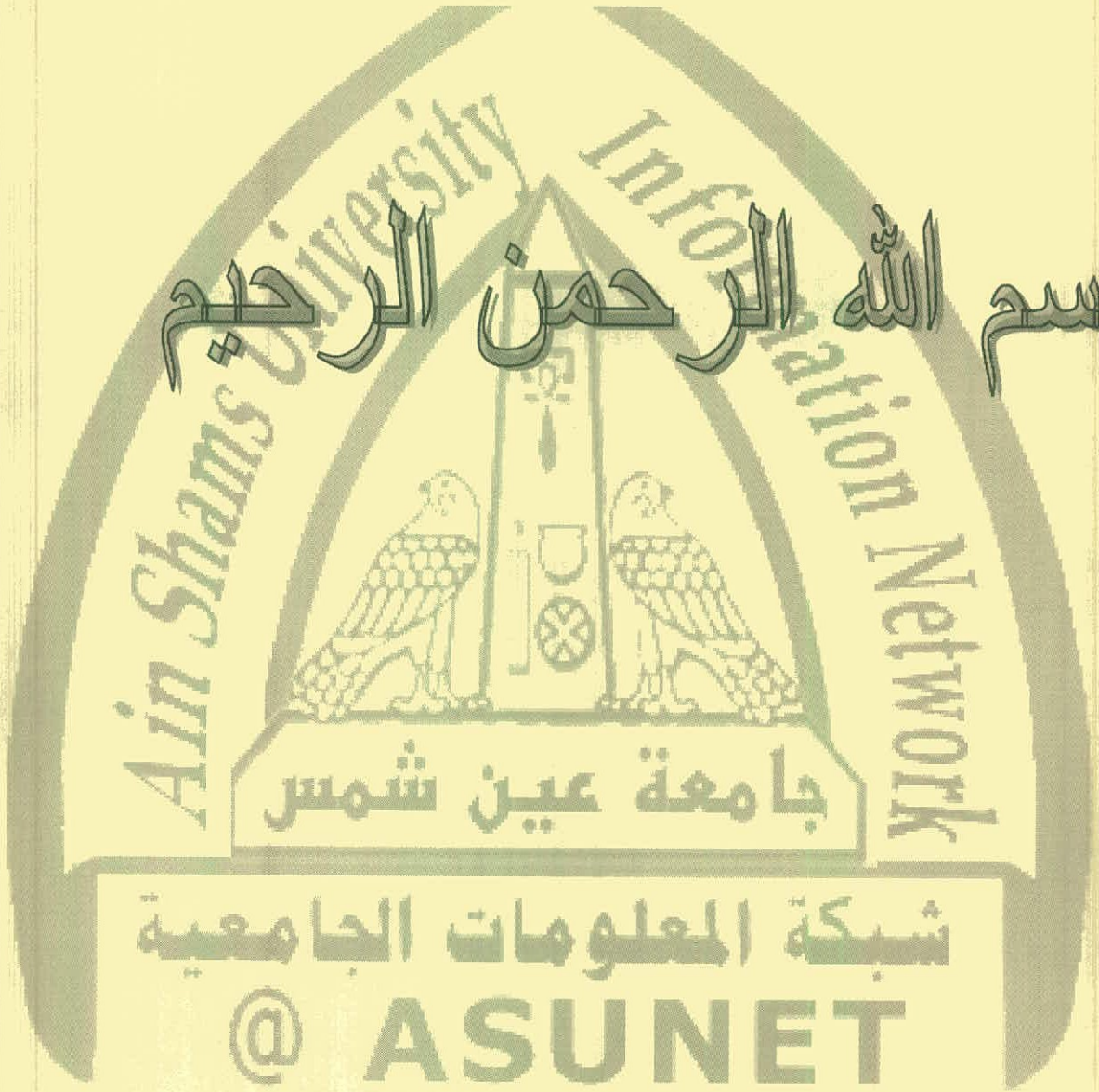
شبكة المعلومات الجامعية



بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

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Cairo University
Institute of Statistical Studies and Research
Department of Computer and Information Sciences

Fuzzy Rough Set Approaches For Data Clustering

A thesis submitted in partial fulfillment of requirements for the degree of master of computer science

Submitted by

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April 2009

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Approval sheet

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Statement

I certify that this work has not been accepted in substance for any academic degree and is not being concurrently submitted in candidature for any other degree.

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Student name: Usama Mokhtar Hassan.

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Abstract

One of the most important methods in analysis of large data sets is clustering. Cluster analysis is a technique for classifying data, i.e., to divide a given dataset into a set of classes or clusters. The goal is to divide the dataset in such a way that two cases from the same cluster are as similar as possible and two cases from different clusters are as dissimilar as possible.

In this thesis, we propose modification to one of modern clustering which is Fuzzy Rough C-Means (FRCM). The algorithm named at Merging Fuzzy Rough C-Means (MFRCM) Clustering Algorithm. This algorithm can achieve high accuracy result when it compare with other trademark clustering algorithm such FCM and FRCM it self. Aim of This algorithm to cluster data with a minimum number of errors in clustering process.

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