شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

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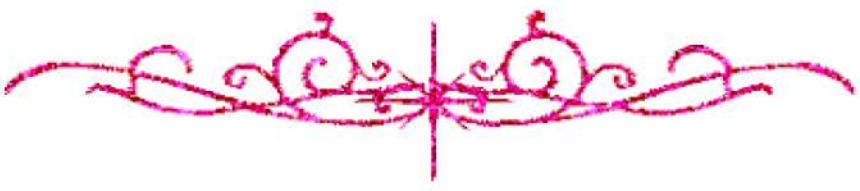
بعض الوثائق الأصلية تالفة



بالرسالة صفحات لم ترد بالأصل

NEW CONSIDRATIONS FOR AUTOMATED GENERALIZATION PROCESS IN THE CONTEXT OF GIS

B17944

by

Wessam Hussein Abdelghani

A Thesis Submitted to the
Faculty of Engineering at Cairo University
In Partial Fulfillment of the
Requirement for the Degree of
MASTER OF SCIENCE
in
CIVIL ENGINEERING

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ABSTRACT

The lack of digital maps at different scales is considered an impediment for GIS applications due to the high cost of the conversion process and the absence of automated **Generalization** tools. Hence, the conversion process is repeated for each scale and, the attribute database is rebuilt to be relevant to the geometric modifications due to scale change.

Many researchers have exerted a lot to solve the automated **Generalization** problem but they focus on specific topics (linear features, some range of scales, and some types of maps). Most of researchers have approached the problem from cartographic point of view, however, if we deal with automated **Generalization** from the GIS point of view, new dimensions will appear and the problems will be different. Through GIS environment and the assistance of object oriented programming tools and with new expert systems techniques, the automated **Generalization** problem could be simplified.

In this research, the automated **Generalization** process is discussed in the GIS context. Past and present attempts are shown. New approaches and future trends are studied. Two existing automated **Generalization** systems are discussed. Also proposed solutions are presented. Finally an experiment for automating the generalization process is executed, and the results are discussed. The whole effort could be seen as an attempt towards comprehensive solution for automated **Generalization process**.

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