ملخص البحث رقم (١)

ملخصات الأبحاث المقدمة من الدكتورة / هالة عبدالحميد مصطفى للترقية الى درجة استاذ مساعد

تخصص نظم المعلومات والمقدمة إلى اللجنة العلمية الدائمة للحاسبات و المعلومات

English Title	"spatial r-tree index based on grid division For query processing"
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English Abstract	Tracing moving objects have turned out to be essential in our life and have a lot of uses like: GPS guide, traffic monitor based administrations and location-based services. Tracking the changing places of objects has turned into important issues. The moving entities send their positions to the server through a system and large amount of data is generated from these objects with high frequent updates so we need an index structure to retrieve information as fast as possible. The index structure should be adaptive, dynamic to monitor the locations of objects and quick to give responses to the inquiries efficiently. The most well- known kinds of queries strategies in moving objects databases are Rang, Point and K-Nearest Neighbour and inquiries. This study uses R-tree method to get detailed range query results efficiently. But using R-tree only will generate much overlapping and coverage between MBR. So R-tree by combining with Grid- partition index is used because grid-index can reduce the overlap and coverage between MBR. The query performance will be efficient by using these methods. We perform an extensive experimental study to compare the two approaches on modern hardware.