

TUTORIAL 2

Spatial Databases

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Spatial databases are becoming increasingly important in applications in computer vision, cartography, computer graphics, solid modeling, and robotics. The implementation of spatial databases involves many issues including a choice among a number of different representations, as well as the types of queries to be supported. In this tutorial we review some of the most recent representations and the type of operations that they are designed to support. We also discuss methods of integrating spatial and non-spatial data in conventional database management systems, as well as examine some existing spatial database systems. A live demonstration will be given of a spatial database management systems that employs these concepts.

The tutorial will cover the following topics:

- Uniform representations of different spatial data types
- Spatial operations and queries
- Integration of spatial and nonspatial data into relational databases
- Query optimization issues
- Demo of an example spatial database s