Abstract

The applications of spatial database (2D and 3D vector maps) are more and more popular in the computer and network environments. It is the reason why information security is an important issue. Data hiding schemes may include map data authentication, secret communication for the purposes of copyright protection, integrity authentication, or secret communication. The purpose of this paper is to propose a novel StegoHash algorithm to enhance the security of spatial database. This algorithm is more appropriate for hiding data in vector maps because the distortions can be removed after the hidden data have been extracted. Combining the concepts of traditional cryptography and steganography, a new spatial database cryptosystem is proposed. Here access remains secure in case of steganalytic attacks especially for highly secure areas like defence, research centres etc.
- J. Lin; Y. Fang, B. Chen, and P. Wu: Analysis of Access Control Mechanisms for Spatial Database. The International Archives of the Photogrammetry, Remote Sensing and Spatial
Data Security and Access Control for Geospatial Database sets Using Novel StegoHash Algorithm


Index Terms

Computer Science
Security

Key words

Spatial database

Stenography
StegoHash