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SmartData@PoliTO



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Maxwell Room 5th Floor DET
Corso Castelfidardo, 42/a

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Issues in Spatial Databases and Geographic Information Systems (GIS)

ABSTRACT

An introduction is given to the spatial database issues involved in the design of geographic information systems (GIS) from the perspective of a computer scientist. Some of the topics to be discussed include the nature of a GIS and the functionalities that are desired in such systems. Representation issues will also be reviewed. The emphasis will be on indexing methods as well as the integration of spatial and nonspatial data. Demos will be shown of the SAND Spatial Browser as well as the VASCO JAVA applet which illustrate these ideas.

BIOGRAPHY

Hanan Samet (<http://www.cs.umd.edu/~hjs>) is a Distinguished University Professor of Computer Science at the University of Maryland where he researches the use of hierarchical data structures for GIS and spatial and image databases as well as location-based visualization of spatially-referenced textual data such as documents, news, and tweets.

He is the author of the recent book "Foundations of Multidimensional and Metric Data Structures," published by Morgan-Kaufmann and the first two texts in the field "Design and Analysis of Spatial Data Structures" and "Applications of Spatial Data Structures: Computer Graphics, Image Processing and GIS". He has a Ph.D in Computer Science as well as an MS in Operations Research and Computer Science all from Stanford University and a BS in Engineering from UCLA.



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