



## METADATA

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### Abstract

The e-book presents the modern integrated view of Geographic Information Science (GIScience) which deals with the systematization of the perception, understanding and representation of geographical space. Although it is not primarily an introductory text, aiming primarily to meet the needs of a university audience of higher semesters and requirements that are not covered even by foreign texts, its topics are presented in a holistic-generalized (top-down) and independent way, so that it is useful to all those who want to develop a comprehensive geospatial background. This was made possible because the author team has achieved significant research results, which, after years of maturing in graduate audiences of the MSc in Geoinformatics (such as "Theory of Geoinformatics", "Methods of Representing Geographic Knowledge"

and "Research Topics in EEG"), find their place in undergraduate audiences as well. Topics include the different scientific considerations of geographic information and knowledge, spatial/thematic/semantic reference systems, accuracy/uncertainty, spatio-temporal modelling, complex data structures and models, spatial analysis and geo-visualisation, organisation, linked data, big data, interoperability, standards and Spatial Data Infrastructures (SDIs), Volunteered Geographic Information (VGI) and crowdsourcing, as well as current research/trends in Geographic Information Science. At the end of each chapter, the relevant literature and key terms are mentioned. For a more complete immersion and integration in these concepts, rich visual and multimedia/interactive material is required and therefore used.

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