Record Nr. UNINA9910143628503321 Spatial Cognition II: Integrating Abstract Theories, Empirical Studies, **Titolo** Formal Methods, and Practical Applications / / edited by Christian Freksa, Wilfried Brauer, Christopher Habel, Karl F. Wender Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa 2000 **ISBN** 3-540-45460-8 Edizione [1st ed. 2000.] 1 online resource (XII, 424 p.) Descrizione fisica Lecture Notes in Artificial Intelligence;; 1849 Collana 006.3/32 Disciplina Soggetti Artificial intelligence Geographic information systems Earth sciences Computer graphics Natural language processing (Computer science) Artificial Intelligence Geographical Information Systems/Cartography Earth Sciences, general Computer Graphics Natural Language Processing (NLP) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Maps and Diagrams -- Cognitive Zoom: From Object to Path and Back Nota di contenuto Again -- Monitoring Change: Characteristics of Dynamic Geo-spatial Phenomena for Visual Exploration -- The Use of Maps, Images and "Gestures" for Navigation -- Schematizing Maps: Simplification of Geographic Shape by Discrete Curve Evolution -- Schematic Maps as Wayfinding Aids -- Some Ways that Maps and Diagrams Communicate -- Spatial Communication with Maps: Defining the Correctness of Maps Using a Multi-Agent Simulation -- Schematic Maps for Robot Navigation -- Motion and Spatial Reference -- From Motion Observation to Qualitative Motion Representation -- Lexical Specifications of Paths -- Visual Processing and Representation of

Spatio-temporal Patterns -- Orienting and Reorienting in Egocentric Mental Models -- Investigating Spatial Reference Systems through Distortions in Visual Memory -- Spatial Relations and Spatial Inference -- Towards Cognitive Adequacy of Topological Spatial Relations --Interactive Layout Generation with a Diagrammatic Constraint Language -- Inference and Visualization of Spatial Relations -- A Topological Calculus for Cartographic Entities -- The Influence of Linear Shapes on Solving Interval-Based Configuration Problems -- Navigation in Real and Virtual Spaces -- Transfer of Spatial Knowledge from Virtual to Real Environments -- Coarse Qualitative Descriptions in Robot Navigation -- Oblique Angled Intersections and Barriers: Navigating through a Virtual Maze -- Modelling Navigational Knowledge by Route Graphs -- Using Realistic Virtual Environments in the Study of Spatial Encoding -- Navigating Overlapping Virtual Worlds: Arriving in One Place and Finding that You're Somewhere Else -- Spatial Memory --Influences of Context on Memory for Routes -- Preparing a Cup of Tea and Writing a Letter: Do Script-Based Actions Influence the Representation of a Real Environment? -- Action Related Determinants of Spatial Coding in Perception and Memory -- Investigation of Age and Sex Effects in Spatial Cognitions as Assessed in a Locomotor Maze and in a 2-D Computer Maze.