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Nota di contenuto Applications of different self-organizing map variants to geographical

information science problems / Fernando Bacao, Victor Lobo, Marco Painho -- ; An integrated exploratory geovisualization environment based on self-organizing map / Etien L. Koua, Menno-lan Kraak --Visual exploration of spatial interaction data with self-organizing maps / Jun Yan, Jean-Claude Thill -- Detecting geographic associations in English dialect features in North America within a visual data mining environment integrating self-organizing maps / Jean-Claude Thill ... [et al.] -- Self-organizing maps for density-preserving reduction of objects in cartographic generalization / Monika Sester -- Visualizing human movement in attribute space / Andre Skupin -- Climate analysis, modelling, and regional downscaling using self-organizing maps / Bruce C. Hewitson -- Prototyping broad-scale climate and ecosystem classes by means of self-organising maps / Jurgen P. Kropp, Hans Joachim Schellnhuber -- Self-organising map principles applied towards automating road extraction from remotely sensed imagery / Pete Doucette, Peggy Agouris, Anthony Stefanidis -- ; Epilogue:

Sommario/riassunto

Intelligent systems for GIScience: Where next? A GIScience perspective / Michael Goodchild.

Self-Organising Maps: Applications in GI Science brings together the latest geographical research where extensive use has been made of the SOM algorithm, and provides readers with a snapshot of these tools that can then be adapted and used in new research projects. The book begins with an overview of the SOM technique and the most commonly used (and freely available) software; it is then sectioned to look at the different uses of the technique, namely clustering, data mining and cartography, from a range of application-areas in the biophysical and socio-economic environments.Onl