Record Nr. UNINA9910299664403321 Autore Feng Jun Titolo Index and Query Methods in Road Networks / / by Jun Feng, Toyohide Watanabe Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2015 **ISBN** 3-319-10789-5 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (169 p.) Collana Smart Innovation, Systems and Technologies, , 2190-3026; ; 29 006.3 Disciplina 620 629.2 658.5 Soggetti Computational intelligence Industrial management Automotive engineering Computational Intelligence Industrial Management Automotive Engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references. Introduction -- Index Techniques -- Road Network Model -- Index in Nota di contenuto Road Network -- Query in Road Network -- The Trend of Development. This book presents the index and guery techniques on road network Sommario/riassunto and moving objects which are limited to road network. Here, the road network of non-Euclidean space has its unique characteristics such that two moving objects may be very close in a straight line distance. The index used in two-dimensional Euclidean space is not always appropriate for moving objects on road network. Therefore, the index structure needs to be improved in order to obtain suitable indexing methods, explore the shortest path and acquire nearest neighbor query and aggregation query methods under the new index structures. Chapter 1 of this book introduces the present situation of intelligent traffic and index in road network, Chapter 2 introduces the relevant

existing spatial indexing methods. Chapter 3-5 focus on several issues

of road network and query, they involves: traffic road network models (see Chapter 3), index structures (see Chapter 4) and aggregate query methods (see Chapter 5). Finally, in Chapter 6, the book briefly describes the applications and the development of intelligent transportation in the future.