Record Nr. UNINA9910800112803321 Autore Macioszek Elbieta Titolo Road Traffic Analysis, Theoretical Approaches and Practical Solutions / / edited by Elbieta Macioszek, Irena Jurdana, Grzegorz Sierpiski Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2024 Pubbl/distr/stampa **ISBN** 3-031-51449-1 Edizione [1st ed. 2024.] Descrizione fisica 1 online resource (135 pages) Collana Lecture Notes in Networks and Systems, , 2367-3389;; 877 Altri autori (Persone) Jurdanalrena SierpiskiGrzegorz Disciplina 006.3 Soggetti Computational intelligence Transportation engineering Traffic engineering Computational Intelligence Transportation Technology and Traffic Engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Development of a camera-based parking monitoring system with an Nota di contenuto automatic parking spot identification -- Energy-efficient radio platforms for implementation of nodes of sensor networks -- A heuristic approach to assess the performance efficiency of road intersections in urban environments from the resilience perspective --The ecological footprint of embedded rail structures -- Vectors of development of mountain tricycles. Sommario/riassunto This book presents many valuable tips for making decisions related to road traffic in transport networks. The knowledge base in practical examples, as well as the decision support systems described in this volume, finds interest among people who face the daily challenge of searching for advanced solutions and practical applications in road traffic engineering. The publication is therefore addressed to local authorities related to the planning and development of development strategies for selected areas with regard to transport (both in the urban and regional dimension) and to representatives of business and industry, as people directly involved in the implementation of traffic

engineering solutions. The tips contained in individual sections of the

publication allow to look at a given problem in an advanced way and facilitate the selection of the appropriate strategy (among others, in relation to the heuristic approach to assessing the performance efficiency of road intersections inurban environments from the resilience perspective, modeling the distribution of transport pollutants in a naturally ventilated road tunnel, development of a camera-based parking monitoring system with an automatic parking spot identification). In turn, due to a new approach to theoretical models (including, inter alia, problems with the safety of passengers at tram stops or energy-efficient radio platforms for the implementation of nodes of sensor networks), the publication also interests scientists and researchers carrying out research in this area. The publication entitled "Road Traffic Analysis, Theoretical Approaches and Practical Solutions" contains selected papers submitted to and presented at the 19th "Transport Systems. Theory and Practice" Scientific and Technical Conference organized by the Department of Transport Systems, Traffic Engineering and Logistics at the Faculty of Transport and Aviation Engineering at the Silesian University of Technology. The conference took placeon September 18-19, 2023, in Katowice (Poland).