

*Special Issue Reprint*

## **Fuzzy Logic Applications in Traffic and Transportation Engineering**

[www.mdpi.com/books/reprint/10959](http://www.mdpi.com/books/reprint/10959)

Edited by

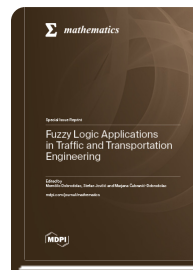
Momčilo Dobrodolac

Stefan Jovčić

Marjana Čubranić-Dobrodolac

ISBN 978-3-7258-4021-2 (Hardback)

ISBN 978-3-7258-4022-9 (PDF)



Traffic and transportation engineering involves the application of scientific principles to the planning, design, and operation of facilities for any mode of transportation and to human resource management in industry, which are required to enable the safe, efficient, economical, and environmentally compatible movement of people and goods. Given the complexity of transportation engineering processes, fuzzy logic is a convenient tool for modeling these processes. Fuzzy logic, based on approximate human-like reasoning, offers diverse applications in transportation, a field marked by constant changes, uncertainty, and imprecision. A particular advantage of fuzzy systems is the ability to include multiple goals in calculations and, using adequate optimization algorithms, to achieve high similarity to real-world phenomena. This Special Issue of *Mathematics*, titled “Fuzzy Logic Applications in Traffic and Transportation Engineering”, is devoted to examples of implementing fuzzy logic to solve various traffic and transportation engineering problems for all modes, including road, rail, air, waterborne transport, postal, and logistics industries, as well as telecommunications. The Guest Editors were inspired by the current gap in the literature regarding this topic and the significant potential of fuzzy logic for applications within the field of transportation. Their previous research involved modeling driver behavior using fuzzy inference systems, optimizing them with metaheuristic algorithms, and incorporating fuzzy sets into decision-making theory.

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



## Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



## Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



## High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



## High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



## Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.