Special Issue Reprint

Advances in Computational Intelligence in Geotechnical and Geological Engineering

www.mdpi.com/books/reprint/10182

Edited by
Danial Jahed Armaghani
Hadi Khabbaz
Manoj Khandelwal
Niaz Muhammad Shahani
Ramesh Murlidhar Bhatawdekar
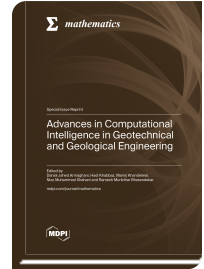
This is a groundbreaking reprint that explores the cutting-edge applications of computational intelligence (CI) in geotechnical and geological engineering. This comprehensive volume draws from the latest research and developments in the field, presenting innovative solutions to complex real-world problems using artificial neural networks, fuzzy logic, evolutionary algorithms, and other CI techniques. The reprint covers a wide range of topics, including soil mechanics, rock mechanics, and foundation engineering. It features in-depth case studies that demonstrate the practical applications of CI in solving challenging geotechnical issues, as well as explores the hybrid CI models that combine multiple techniques for enhanced performance. The reprint also delves into the integration of CI-based, risk-based, and reliability-based techniques with basic theories and concepts in geotechnics and geomechanics. By bridging the gap between traditional geotechnical engineering practices and advanced CI techniques, this reprint paves the way for more efficient, accurate, and innovative solutions in geotechnical engineering. The reprint not only presents the current state-of-the-art CI applications for geotechnical engineering but also provides insights into the future directions and potential advancements. It explores how CI can be applied to the various aspects of geotechnical engineering. This comprehensive makes it an essential read for anyone interested in the intersection of CI and engineering, offering a broad perspective on the potential of CI to revolutionize

MDPI

MDPI\Books
Publishing Open Access Books & Series

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.

Learn more ▶ mdpi.com/books