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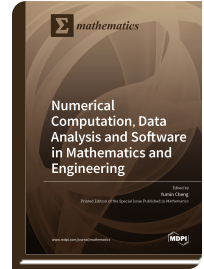
*Special Issue Reprint*

## **Numerical Computation, Data Analysis and Software in Mathematics and Engineering**

[www.mdpi.com/books/reprint/5870](http://www.mdpi.com/books/reprint/5870)

Edited by  
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ISBN 978-3-0365-4777-0 (Hardback)  
ISBN 978-3-0365-4778-7 (PDF)



The present book contains 14 articles that were accepted for publication in the Special Issue “Numerical Computation, Data Analysis and Software in Mathematics and Engineering” of the MDPI journal *Mathematics*. The topics of these articles include the aspects of the meshless method, numerical simulation, mathematical models, deep learning and data analysis. Meshless methods, such as the improved element-free Galerkin method, the dimension-splitting, interpolating, moving, least-squares method, the dimension-splitting, generalized, interpolating, element-free Galerkin method and the improved interpolating, complex variable, element-free Galerkin method, are presented. Some complicated problems, such as the cold roll-forming process, ceramics compound insulation block, crack propagation and heavy-haul railway tunnel with defects, are numerically analyzed. Mathematical models, such as the lattice hydrodynamic model, extended car-following model and smart helmet-based PLS-BPNN error compensation model, are proposed. The use of the deep learning approach to predict the mechanical properties of single-network hydrogel is presented, and data analysis for land leasing is discussed.

This book will be interesting and useful for those working in the meshless method, numerical simulation, mathematical model, deep learning and data analysis fields.



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