

## Special Issue

# Optimization and Machine Learning

### Message from the Guest Editor

We are pleased to invite you to submit your research to be considered for publication in a Special Issue of *AppliedMath*, focused on the latest advances in optimization and machine learning. The goal of this Special Issue is to showcase the latest advances in this field and to provide a platform for researchers to share their promising findings. Optimization and machine learning (ML) have become two of the most popular issues in the last decade. ML provides a variety of tricks for data preprocessing, feature extraction, model selection, etc., whereas optimization algorithms offer elementary techniques for the construction of mathematical models and parameter fitting of ML techniques. Arising from the deep integration of optimization and ML, excellent optimization-based ML algorithms and efficient ML-assisted optimization algorithms can be developed to address the challenges of scientific research and engineering applications in the big data era...

### Guest Editor

Dr. Yu Chen

Department of Mathematics, School of Science, Wuhan University of Technology, Wuhan 430070, China

### Deadline for manuscript submissions

30 November 2025



## AppliedMath

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*AppliedMath*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[appliedmath@mdpi.com](mailto:appliedmath@mdpi.com)

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## About the Journal

### Message from the Editor-in-Chief

Mathematics permeates all kinds of academic worlds and is a fountain flowing with innovative development. The journal *AppliedMath*, publishing high-quality refereed papers discussing various aspects of applied mathematics, is dedicated to promoting the integration of mathematics with applied disciplines to cultivate a profitable frontier of mathematics. The journal highlights articles devoted to the mathematical treatment of questions and phenomena arising in physics, chemistry, biology, medicine, pharmacy, engineering, information science, social sciences, and humanities. One of the missions of this journal is to serve scientists by quickly announcing the seeds of significant mathematical breakthroughs in science and technology.

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### Editor-in-Chief

Prof. Dr. Takayuki Hibi

Department of Pure and Applied Mathematics, Graduate School of Information Science and Technology, Osaka University, 1-5 Yamadaoka, Suita 565-0871, Osaka, Japan

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