

FITEE Special Feature on
Intelligent Dynamics Optimization Methods and
Their Applications
Call for Papers

(Submission by Dec. 31, 2022)

Many core issues in defense, engineering, computer, management, and agriculture can be posed as optimization problems; thus, research on optimization methods has become a hotspot. Besides, with the development of computer technology, some of the large-scale optimization problems can be solved on computers, making the optimization methods adopted more widely than before.

With the rapid development of artificial intelligence technology, wireless communication, and computer technology, the scale of the networks has become larger, and the control tasks of networks have become more complex, which requires the dynamic systems to be more “intelligent.” In recent years, with the continuous progress of dynamics optimization technologies such as neurodynamic optimization and multi-agent system optimization, intelligent dynamics optimization has made great progress and is widely used in machine learning, blockchain technology, smart grid, unmanned vehicle (UAV) control, resource allocation, and other areas. Although academic researchers put forward and improve the theories and technologies constantly, due to the complexity of multi-disciplinary integration, there are still many challenges in intelligent dynamics optimization, like global optimization problems, multi-objective problems, the improvement of the robustness, the analysis of the convergence speed, etc.

This special issue focuses on the theoretical analysis, technical development, and applications of intelligent dynamics optimization methods such as neurodynamic optimization, distributed optimization, and global (nonconvex) optimization. It is to provide a platform for researchers and engineers to present new results and emerging research directions. This special feature focuses on, but is not limited to, the following topics:

- Intelligent dynamics optimization methods for global (nonconvex) optimization
- Intelligent dynamics optimization methods for large-scale hybrid problems
- Intelligent dynamics optimization methods under multi-objective mixed constraints
- Design and analysis of distributed optimization algorithms
- Network game methods and theories related to optimization
- Intelligent dynamics optimization methods for complex large-scale systems, such as energy systems, transportation systems, and robot systems
- Intelligent dynamics optimization methods for complex problems, such as machine learning, blockchain technology, and image processing
- Intelligent dynamics optimization methods for other applications, such as precision agriculture, resource allocation, and economic scheduling

Submission Instructions

All submitted manuscripts must be written in English and must not be under consideration elsewhere for publication. Guidelines for authors are available at <http://www.jzus.zju.edu.cn/manuscript.php>. Either Word or LaTeX format is acceptable. When Word is used, the layout of the text should be in single column, 1.5 lines spacing, 10.5 pt font size, and Times New Roman font. A template is available at http://www.jzus.zju.edu.cn/download/FITEE_LaTeX_template.zip. Manuscripts should be submitted via <https://www.editorialmanager.com/zusc> under the article type “S.I. - IntDynOpt.” All articles will undergo international peer review and crosscheck processes before they are accepted to ensure high quality.

Introduction to *FITEE*

FITEE is a peer-reviewed journal launched by the Chinese Academy of Engineering (CAE) and Zhejiang University, co-published by Zhejiang University Press and Springer. It is indexed by SCI-E (IF=2.526), Ei Compendex, Scopus, DBLP, etc. *FITEE* aims to publish the latest implementation of applications, principles, and algorithms in the broad areas of Electrical and Electronic Engineering.

Important Dates

Manuscript submission by Dec. 31, 2022

Acceptance notification by Mar. 31, 2023 (online first once accepted)

Publication date: May/June, 2023

Editorial Board

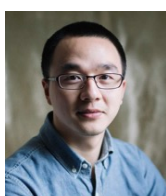


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(Released on Aug. 10, 2022)