

Special Issue

Intelligent Software Engineering: Synergy Between AI and Software Engineering

Message from the Guest Editors

This Special Issue will provide a comprehensive forum for disseminating the most recent theoretical, methodological, and practical advances in ISE. It will enhance the connection of researchers in the fields of AI and software engineering, promoting interdisciplinary collaboration and cross-domain innovation.

By consolidating emerging studies on AI-assisted software repair, code synthesis, intelligent testing, and autonomous software evolution, this Special Issue will contribute to the development of next-generation software systems that are more adaptive, robust, and trustworthy.

Topics of interest include, but are not limited to, the following

- Intelligent software repair and self-healing mechanisms;
- LLM-based software development and debugging;
- AI-assisted software testing and test case generation;
- Intelligent requirements analysis and specification mining;
- Reinforcement learning for adaptive software optimization;
- Software defect prediction using deep learning models;
- Explainable AI for software engineering decision support;
- Human-AI collaboration in software design and maintenance;
- Knowledge graph-based software reasoning and dependency analysis.

Guest Editors

Prof. Dr. Yunwei Dong
Prof. Dr. Guanjun Liu
Dr. Xiaomin Wei



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About the Journal

Message from the Editor-in-Chief

Future Internet is a fast-growing journal devoted to rapid publications of the latest results in the general areas of computer networking/communications and information systems, with a focus on the Internet of Things, big data and augmented intelligence, smart systems (in terms of technologies, architectures, and applications), network virtualization, edge/fog computing, and cybersecurity. Both theoretical and experimental papers are welcome. Every year, *Future Internet* also features Special Issues dedicated to specific topics within the journal's scope.

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