Special Issue

Using Large Language Models for Scientific Problem Solving and Engineering Design

Message from the Guest Editors

This Special Issue is dedicated to papers presenting overviews and state-of-the-art methods that use Large Language Models (LLMs) for scientific problem solving and engineering design. LLMs offer several intriguing, new capabilities, like content creation, summarization, question answering, translation, interfacing to human language, and so on. Still, problem solving and design automation also involve specific activities, which require devising more effective techniques for problem framing, solution partitioning, creating correct and optimized implementations (designs), addressing a broad set of constraints, incorporating human preferences, to name a few. We encourage interdisciplinary submissions that bridge machine learning, electronic design automation, design science, and cognitive science, but any work discussing using LLMs for problem solving and design is of interest.

Guest Editors

Prof. Dr. Alex Doboli

Prof. Dr. K. Wendy Tang

Prof. Dr. Simona Doboli

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Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Andreas Holzinger
1. Human-Centered AI Laboratory, Institute of Forest Engineering, Department of Forest and Soil Sciences, University of Natural Resources and Life Sciences, 1190 Vienna, Austria
2. xAI Laboratory, Alberta Machine Intelligence Institute, University of Alberta, Edmonton, AB T5J 3B1, Canada

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