

题目: Introducing MindOpt, a Comprehensive Optimization Suite for Modeling, Solving, and Collaboration

报告人: Dr. Wotao Yin, The Alibaba DAMO Academy

邀请人: Xin Liu, Professor

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摘要:

We present the new optimization solver suite, MindOpt, designed to address the challenges of today's complex optimization problems. This all-encompassing suite offers a diverse range of numerical solvers for linear programming, linear network-flow problems, mixed-integer programming, and specific nonlinear programming tasks.

MindOpt introduces an innovative algebraic programming language tailored for optimization modeling, enabling users to create efficient and sophisticated models with ease. The suite also features a state-of-the-art web-based platform, allowing users to develop and solve optimization problems in real-time, from anywhere in the world.

To further enhance performance, we have developed a solver-parameter tuner tool that accelerates the parameter tuning process by evaluating parameters concurrently across multiple machines. This breakthrough technology allows for rapid optimization and improved performance on even the most challenging problems.

Lastly, we extend an invitation to join our collaborative community. We encourage users to contribute new algorithms, share insights, and apply MindOpt to solve real-world applications. Together, we can shape the future of optimization and drive innovation in this exciting field.