

Welcome to the <u>First International Workshop on Parallel and Distributed Algorithms for Decision</u> <u>Sciences (PDADS), 2021</u> to be held on August 9, 2021 in Chicago, Illinois, USA. The goal of this workshop is to create a forum for scientists, engineers and practitioners to share new results and collaborate on ideas at the intersection of parallel and distributed algorithms, decision sciences and combinatorial optimization. Both regular papers as well as short position papers describing work-in-progress with innovative ideas related to the workshop topics are being solicited. Accepted papers will be published by ACM ICPS in a workshop proceedings volume available for download from the ACM digital library. For paper submission guidelines, click [here].

Topics of Interest

Topics of interest include, but are not limited to:

- Parallel algorithms for integer/mixed-integer programming, linear/nonlinear programming, stochastic programming, robust optimization, combinatorial optimization, feasibility problems (SAT, CP, etc.).
- Parallel heuristic and meta-heuristic algorithms.
- Parallel evolutionary algorithms, swarm intelligence, ant colonies, other.
- Parallel local and complete search methods.
- Learning approaches for optimization in parallel and distributed environments.
- Parallel and distributed approaches for parameter tuning, simulation-based optimization, and black box optimization.
- Parallel algorithm portfolios.
- Quantum optimization algorithms.
- Use of randomization techniques for scalable decision support systems.
- Application of decision support systems on novel computing platforms (shared/distributed memory, edge devices, cloud platforms, field programable gate arrays, quantum computers, etc.).
- Use of parallel computing for timely and/or higher quality decision support.
- Theoretical analysis of convergence and/or complexity of parallel optimization algorithms and decision support systems.

Important Dates

The following are hard deadlines: Paper Abstract Deadline: May 24, 2021 (AoE) Full Paper Submission Deadline: May 31, 2021 (AoE) Author Notification: June 21, 2021 (AoE) Camera-Ready Deadline: June 28, 2021 (AoE) Workshop: August 9, 2021

SUBMIT PAPER