Zhichao Jia

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https://zhichao-jia.github.io/

Education

Georgia Institute of Technology, Atlanta, GA — Present
PhD Student in Operations Research
Advised by Guanghui (George) Lan

Johns Hopkins University, Baltimore, MD — Dec. 2022
Master of Science and Engineering in Applied Mathematics and Statistics
Thesis: *First-Order Methods for Nonsmooth Nonconvex Functional Constrained Optimization with or without Slater Points*
Advised by Benjamin Grimmer

Sun Yat-Sen University, Guangzhou, China — Jun. 2021
Bachelor of Science in Information and Computing Science
Thesis: *On an FFHE-Inspired Method for Effectively Solving Differential Riccati Equations*
Advised by Tao Wang

Papers in Progress

"Goldstein Stationarity in Lipschitz Constrained Optimization"
Benjamin Grimmer, **Z. Jia** — 2023

"First-Order Methods for Nonsmooth Nonconvex Functional Constrained Optimization with or without Slater Points"
Z. Jia, Benjamin Grimmer — 2022

"Switch Updating in SPSA Algorithm for Stochastic Optimization with Inequality Constraints"
Z. Jia, Ziyi Wei, James C. Spall — 2022

Publications

"SPSA-Based Switch Updating Algorithm for Constrained Stochastic Optimization"
Z. Jia, Ziyi Wei — *Conference on Information Science and Systems 2023*

Patents

"Mechanical Arm Motion Planning Method based on Fast and Flexible Full-Pure Embedding Thought"
China Patent 202110154750.4
Tao Wang, Yuning Ding, **Z. Jia**, Zi'ang Fang — Issued 02/04/2021

Academic Service

Journal Review:
Computational Optimization and Applications

Conference Review:
Mediterranean Conference on Control and Automation 2023
Conference on Information Science and Systems 2023
American Control Conference 2023

Awards

JHU Applied Mathematics and Statistics Master's Research Award — Apr. 2023
Ranked 6th in Datathon@LISH — Feb. 2022
Third Prize in China Undergraduate Mathematical Contest in Modeling (top 40%) — Sept. 2019

Skills

Languages: Chinese-Mandarin (native), English (fluent)
Programming: C, C++, Python, Matlab, SQL, R