

EDUCATION

Georgia Institute of Technology, Atlanta, GA Present
PhD Student in Operations Research
Advised by Guanghui (George) Lan
Courses: Linear/Nonlinear/Discrete Optimization, Stochastic Processes, Simulation, Reinforcement Learning

Johns Hopkins University, Baltimore, MD Dec. 2022
Master of Science and Engineering in Applied Mathematics and Statistics; GPA: 4.0/4.0
Thesis: *First-Order Methods for Nonsmooth Nonconvex Functional Constrained Optimization with or without Slater Points*
Advised by Benjamin Grimmer
Courses: Nonlinear/Stochastic/Large-Scale Optimization, Control Theory, Statistics

Sun Yat-Sen University, Guangzhou, China Jun. 2021
Bachelor of Science in Information and Computing Science; GPA: 3.7/4.0
Thesis: *On an FFHE-Inspired Method for Effectively Solving Differential Riccati Equations*
Advised by Tao Wang
Courses: Real Analysis, Linear Algebra, Numerical Methods, Statistics, Optimization, Machine Learning, Data Mining

PAPERS IN PROGRESS

“Goldstein Stationarity in Lipschitz Constrained Optimization”
Benjamin Grimmer, **Z. Jia** 2023

“First-Order Methods for Nonsmooth Nonconvex Constrained Optimization”
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

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