

## EDUCATION

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**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

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“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 SPSSA Algorithm for Stochastic Optimization with Inequality Constraints”

**Z. Jia**, Ziyi Wei, James C. Spall

2022

## PUBLICATIONS

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“SPSSA-Based Switch Updating Algorithm for Constrained Stochastic Optimization”

**Z. Jia**, Ziyi Wei

*Conference on Information Science and Systems 2023*

## PATENTS

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“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

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Journal Reviewing:

*Computational Optimization and Applications*

Conference Reviewing:

*Mediterranean Conference on Control and Automation 2023*

*Conference on Information Science and Systems 2023*

*American Control Conference 2023*

## AWARDS

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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

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Languages: Chinese-Mandarin (native), English (fluent)

Programming: C, C++, Python, Matlab, SQL, R