

Rui Gong

H. Milton Stewart School of Industrial and Systems Engineering, Georgia Institute of Technology
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RESEARCH INTERESTS Continuous Optimization, Convex Optimization, Semidefinite Optimization and their applications to other areas.

EDUCATION **Georgia Institute of Technology** Atlanta, Georgia, U.S.A.
PhD in Operation Research 2023.08-2027.08
• Advisor: Diego Cifuentes, Alejandro Toriello

University of Waterloo Waterloo, Ontario, Canada
M.Math. in Combinatorics & Optimization 2021.09-2023.06
• Thesis: Low-Rank Plus Sparse Decompositions of Large-Scale Matrices via Semidefinite Optimization
• Advisor: Levent Tunçel
• Passed C&O PhD first stage comprehensive exams: Continuous Optimization, Graph Theory

University of Waterloo Waterloo, Ontario, Canada
B.Math. Triple Major in Mathematical Finance, Mathematical Optimization, Statistics 2017.09-2021.08
• Dean's Honour List

RESEARCH

SCHOLARSHIPS & AWARDS **Georgia Institute of Technology**
ISyE Premium Fellowship
Ronald & Carol Beerman Fellowship
University of Waterloo
Math Domestic Graduate Student Award 2022-2023
Sinclair Graduate Scholarship 2023.01-2023.04
Sinclair Graduate Scholarship 2022.09-2022.12
C & O Graduate Award 2022.01-2022.04
Sinclair Graduate Scholarship 2022.01-2022.04
President's Scholarship of Uwaterloo 2017

TALKS Speaker: *Convex Optimization, Factor Analysis and Realizability of a Subspace*, Graduate Research Seminar, Department of Combinatorics & Optimization, Faculty of Mathematics, University of Waterloo. April 11, 2022
Low-Rank Plus Sparse Decompositions of Large-Scale Matrices via Semidefinite Optimization, MMATH Thesis Talk, Department of Combinatorics & Optimization, Faculty of Mathematics, University of Waterloo. May 3, 2023

WORKSHOP Attendee: 24th Midwest Optimization Meeting & Workshop on Large Scale Optimization and Applications, University of Waterloo. October 28-29, 2022
Algorithms, Combinatorics and Optimization Research Network (ACORN) Meeting 2023, Atlanta, Georgia. March 9–11, 2023

WORK EXPERIENCE

Intact Financial Corporation Toronto, Canada
Actuarial Analyst of Ontario PL Pricing 2020.01 - 2020.04
 Extracted and manipulated databases to respond to internal inquiries by SAS. Generated earning and loss reports weekly and monthly by Excel and SAS. Analyzed correctness of rates for insurance premium algorithm with R.

Validus Research Inc. Waterloo, Canada
Quality Assurance Student Engineer 2018.09 - 2018.12
 Created automation tests and check the quality of the programs by Selenium Python.

TEACHING

Teaching Assistant University of Waterloo

- Undergraduate course: Portfolio Optimization (CO372) 2021.09-2022.04; 2022.09-2022.12
 Holding office hours, marking assignments and exams.
- Graduate course: Semidefinite Programming (CO471/671) 2022.05-2022.08
 Marking assignments.

COURSES

Have taken 13 graduate-level courses at Uwaterloo with a grade average of 94.46: Continuous Optimization Convex Optimization and Analysis Semidefinite Optimization Combinatorial Optimization Optimization for Data Science Stochastic Processes Graph Theory Lebesgue Integration and Fourier Analysis Measure and Integration Statistical Learning - Function Estimation Statistical Learning - Classification Quantitative Enterprise Risk Management Mathematics of Financial Markets

TECHNICAL STRENGTHS

Language Proficiency: Native Chinese Speaker, Proficient in English
Programming Languages: Python, Matlab, R, \LaTeX