

Geyu Liang

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EDUCATION

The University of Michigan, Ann Arbor

Doctor of Philosophy in Industrial and Operations Engineering

Ann Arbor, MI

Sep. 2021 –

The University of Chicago

Master of Science in Computational and Applied Math (4.0/4.0)

Chicago, IL

Oct. 2019 – Mar. 2021

The Hong Kong University of Science and Technology

Bachelor of Science in Pure Mathematics Advanced

Hong Kong

Sep. 2015 – June 2019

and Computer Science with First Class Honors (3.9/4.3, Major:4.0/4.3)

AREA OF INTEREST

Convex and Non-convex Optimization, Machine Learning and Algorithms

RESEARCH EXPERIENCE

Graduate Research Assistant

The University of Chicago

May. 2020 – present

Advised by Prof. Yuehaw Khoo

- Studied the least unsquared deviation(LUD) method for point-set registration problem
- **Proved** that least squares solution exhibits good initialization, which allows LUD achieve exact recovery with relatively small sample size
- Paper under working

Undergraduate Research Assistant

The Hong Kong University of Science and Technology

Sep. 2018 – June 2019

Advised by Prof. Shingyu Leung

- Topic: Stefan problem solving by RLS-RBF
- Applied a revised version of radial basis function method to tackle partial differential equations related to moving boundaries.
- Developed a Matlab program that exhibits stable accuracy and promising speed on simple problem setting

Summer Research Assistant

The Oak Ridge National Lab, Knoxville, TN

Jun. 2018 – Aug. 2018

- Topic: High Performance Dynamic Traffic Assignment Based on Variational Inequality
- Used C++ to implement a parallel computing algorithm aiming at dynamic traffic assignment problem

AWARDS AND SCHOLARSHIP

- S.S. Chern Class Achievement Scholarship from HKUST Math Department
- Zhiyuan Scholarship from China Soong Ching Ling Foundation
- The Epsilon Fund Award from HKUST Math Department
- Reaching Out Award from HKSAR Government Scholarship Fund
- Awardee at the ceremony honoring students' academic excellence from HKUST School of Science
- Fong Shu Chuen Scholarship from HKUST
- Dean's List from HKUST School of Science(2016-2019)

EXTRA CURRICULAR

- Volunteer for Oriental Connect International Volunteer Association, in Sri Lanka (2015)
- Leading Mentor in MSSSUG Peer Mentor Program, HKUST (2016)
- Lab Teaching Assistant, HKUST (2017)
- Exchange student at École polytechnique fédérale de Lausanne (Jan.2018 - May.2018)
- Student Representative on the PSD Dean's Student Advisory Committee (DSAC), The University of Chicago (2019-2020)

TECHNICAL SKILLS

- Matlab, Python, C++, L^AT_EX