

Xiaopeng Li

(+1) 3322488122 | (+86) 15679140148 • xl3040@columbia.edu

Education

Columbia University

Ph.D. in Operations Research.

M.S. in Operations Research.

New York, U.S.

Sept 2020 – present

Sept 2020 – May 2021

The Chinese University of Hong Kong, Shenzhen (CUHK(SZ))

B.S. in Applied Mathematics.

Shenzhen, China

Sept 2016 – May 2020

Publications

- Josz, C., & Li, X. (2024). Singular perturbation in heavy ball dynamics. *arXiv preprint arXiv:2407.15044*.
- Josz, C., Lai, L., & Li, X. (2023). Convergence of the Momentum Method for Semialgebraic Functions with Locally Lipschitz Gradients. *SIAM Journal on Optimization*, 33(4), 3012–3037.
- Josz, C., & Li, X. (2023). Certifying the Absence of Spurious Local Minima at Infinity. *SIAM Journal on Optimization*, 33(3), 1416–1439.

Teaching Experience

Teaching Assistant

Columbia University

- IEOR E 3404 Simulation, Spring 2021.
- EEOR E 6616 Convex Optimization, Spring 2024.

Undergraduate Student Teaching Fellows

CUHK(SZ)

- Mathematical Analysis I & II, Fall 2017 & Spring 2018.
- Ordinary Differential Equations, Spring 2019 & Spring 2020.
- Elementary Real Analysis, Fall 2019.

Talks

- INFORMS Annual Meeting, Indianapolis, Oct. 13th, 2023, *Convergence of the momentum method for semi-algebraic functions with locally Lipschitz gradients*.
- SIAM Conference on Optimization, Seattle, June 2nd, 2023, *Certifying the absence of spurious local minima at infinity*.
- INFORMS Annual Meeting, Indianapolis, Oct. 18th, 2022, *Certifying the absence of spurious local minima at infinity*.
- International Conference on Continuous Optimization, Lehigh University, July 26th, 2022, *Certifying the absence of spurious local minima at infinity*.

Honors & Awards

- Academic Performance Scholarship (CUHK(SZ), 2017, 2018 & 2019)
- Dean's List (CUHK(SZ), 2017, 2018 & 2019)
- Undergraduate Research Award (CUHK(SZ), 2018 & 2019)
- Second Prize in China Undergraduate Mathematical Contest in Modeling (China, 2018)
- Second Prize in National College Students Mathematical Competition (China, 2018)