# Xiaopeng Li

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## **Education**

**Columbia University** 

Ph.D. in Operations Research. M.S. in Operations Research.

Sept 2020 – present Sept 2020 – May 2021

New York, U.S.

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

B.S. in Applied Mathematics.

Shenzhen, China Sept 2016 – May 2020

#### **Publications**

- ➤ Josz, C., Lai, L., & Li, X. (2024). Proximal random reshuffling under local Lipschitz continuity. *arXiv* preprint arXiv:2408.07182.
- ➤ 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, Phoenix, Oct. 13<sup>th</sup>, 2023, Convergence of the momentum method for semi-algebraic functions with locally Lipschitz gradients.
- ➤ SIAM Conference on Optimization, Seattle, June 2<sup>nd</sup>, 2023, *Certifying the absence of spurious local minima at infinity*.
- ➤ INFORMS Annual Meeting, Indianapolis, Oct. 18<sup>th</sup>, 2022, Certifying the absence of spurious local minima at infinity.
- International Conference on Continuous Optimization, Lehigh University, July 26<sup>th</sup>, 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)