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EDUCATION

- 09/2021 – Now ◇ **Ph.D. Computational Mathematics**
Beijing International Center for Mathematical Research, Peking University.
Member of **The Elite Ph.D. Program in Applied Mathematics**.
Advisor: Prof. **Zaiwen Wen**.
- 09/2017 – 07/2021 ◇ **B.Sc. Computational Mathematics**
School of Mathematical Sciences, Peking University.
Member of **The Elite Program of Applied Mathematics and Statistics for Undergraduates**.
- 09/2018 – 07/2021 ◇ **B.Econ. Economics**
National School of Development, Peking University.

PUBLICATIONS (* denotes co-first authors)

Preprints

- 1 Chenyi Li*, Shuchen Zhu*, **Zhonglin Xie**, and Zaiwen Wen, *Accelerated Natural Gradient Method for Parametric Manifold Optimization*, (Under review at SIAM Journal on Scientific Computing), 2025. arXiv: [2504.05753 \[math.OC\]](#).
- 2 Hongliang Lu*, **Zhonglin Xie***, Yaoyu Wu, Can Ren, Yuxuan Chen, and Zaiwen Wen, *OptMATH: A Scalable Bidirectional Data Synthesis Framework for Optimization Modeling*, (Under review at ICML 2025), 2025. arXiv: [2502.11102 \[cs.AI\]](#).
- 3 **Zhonglin Xie**, Wotao Yin, and Zaiwen Wen, *ODE-Based Learning to Optimize*, (Under review at Math. Prog.), 2024. arXiv: [2406.02006 \[math.OC\]](#).

Journal Articles

- 1 Jinxin Wang, Fan Zhang, **Zhonglin Xie**, Zaiwen Wen, and Gong Zhang, *Joint Bandwidth Allocation and Path Selection in WANs with Path Cardinality Constraints*, Journal of Communications and Information Networks, vol. 6, no. 3, pp. 237–250, 2021.  DOI: [10.23919/JCIN.2021.9549120](#).

Conference Proceedings

- 1 Yu Zhang*, Yifan Chen*, **Zhonglin Xie**, Hong Xu, Zaiwen Wen, Yibo Lin, and Bei Yu, *LRSDP: Low-Rank SDP for Triple Patterning Lithography Layout Decomposition*, in ACM/IEEE Design Automation Conference (DAC), San Francisco, CA, Jul. 2023.

TEACHING

- 2024, Summer ◇ TA, Modern Optimization (PKU Summer School on Applied Mathematics, Lectured by Professor Yurii Nesterov).
- 2023, Fall ◇ TA, Convex Optimization.
- 2022, Fall ◇ TA, Convex Optimization.
- 2022, Summer ◇ TA, Deep Learning Optimization Theory (PKU Summer School on Applied Mathematics).
- 2022, Spring ◇ TA, Learning by Research.
- 2021, Fall ◇ TA, Advanced Mathematics A (I).

INTERNSHIP

- 08/2020-10/2020 ◇ Theory Lab, Huawei Technologies Co. Ltd., Beijing, China.

SELECTED AWARDS

- 2024 ◇ Presidential Scholarship, Peking University.
- 2023 ◇ Presidential Scholarship, Peking University.
 ◇ Third-Class Scholarship, Peking University.
- 2022 ◇ Ubiquant Scholarship, Peking University.