Bingcheng Hu

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http://derrose5.github.io/



Education

2026 – present **Master Student, Shanghai Normal University.** Computational Mathematics.
Advisor: *Prof. Zhaoxiang Li.*
Research interests: *AI for PDEs, AI for Science, Scientific Machine Learning.*

2022 – 2026 **Bachelor's Degree, Shanghai Normal University.** Electronic Engineering.
Advisor: *Prof. Chunmei Wang.*

Employment History

2026.06 – 2026.08 **Intern Student.** YMSC, Tsinghua University, Beijing, China.
Advisor: *Prof. Angelica I. Aviles-Rivero.*

2025.01 – 2026.05 **Teaching Assistant.** Xueersi, Shanghai, TAL Education Group.

Research Publications

1. **Bingcheng Hu**, Tianchi Yu, Zhaoxiang Li, and Ivan Oseledets, *TensorSpectra: Bridging the spectral and tensor worlds for high-dimensional PDEs*, 2026. arXiv: 2610.38087.
2. Chun-Wun Cheng, **Bingcheng Hu**, and Angelica I. Aviles-Rivero, *Physics-informed neural plasticity: PDE solvers that reshape themselves*, 2026. arXiv: 2610.09510.
3. **Bingcheng Hu** and Zhaoxiang Li, *CARE-SAV: A conditioning-aware random-feature framework for energy-stable simulation of gradient flows*, 2026. arXiv: 2608.25300.
4. **Bingcheng Hu**, Lixiang Jin, and Zhaoxiang Li, *C-PINN: A neural network framework based on the Cordès condition for solving linear and fully nonlinear equations in non-divergence form and its applications*, 2026. arXiv: 2604.25606.
5. **Bingcheng Hu**, Lixiang Jin, and Zhaoxiang Li, "Solving the fully nonlinear Monge–Ampère equation using the Legendre-Kolmogorov-Arnold network method," *Communications in Nonlinear Science and Numerical Simulation*, vol. 152, 2026, Art. no. 109388. DOI: 10.1016/j.cnsns.2025.109388

Skills

Languages English (fluent), Mandarin Chinese (native).
Coding Python, MATLAB, C/C++, LaTeX, Git, Linux, Bash, HTML/CSS/JavaScript.
Misc. Academic research, teaching, LaTeX typesetting and publishing.

Miscellaneous Experience

Awards and Achievements

2024 **First Prize in Shanghai**, The 14th National College Student Market Research and Analysis Competition.

Miscellaneous Experience (continued)

- **First Prize in Shanghai**, The 14th National Undergraduate E-Commerce Innovation, Creativity and Entrepreneurship Challenge.
- **Third Prize in Shanghai**, The 2024 National Undergraduate Mathematical Modeling Contest.
- **Merit Award in Shanghai**, The 2024 Shanghai Undergraduate Computer Application Skills Competition.
- **Third Prize at SHNU**, China International College Students' Innovation Competition.

2023 **Third Prize**, ASIA-PACIFIC Mathematical Contest in Modeling.

Honors

2026 **China National Scholarship for Graduate Students**.

First-Class Graduate Academic Scholarship.

Outstanding Graduate of Shanghai Normal University.

2025 **Third-Class Undergraduate Academic Scholarship**.

2023 **Third-Class Undergraduate Academic Scholarship**.

Certification

2026 **Teacher Qualification Certificate**. Math, High-School level.

2023 **CET6 in English**.

2022 **CET4 in English**.