Cunxin Huang, PhD Student

✉ huangcunxin@outlook.com   ⬛ OptHuang

🆔 https://orcid.org/0000-0001-7523-6980

🌐 https://opthuang.github.io

🎓 Google Scholar

Education

2022 – today   🔖 **PhD student, Department of Applied Mathematics, The Hong Kong Polytechnic University.**
Applied Optimization and Optimal Control.
Supervised by Dr. Zaikun Zhang and co-supervised by Prof. Xiaojun Chen.
Supported under the Hong Kong PhD Fellowship Scheme (HKPFS).

2018 – 2022   🔖 **BSc, School of Mathematics, Jilin University.**
Information and Computing Science.

Research Interests

🔖 **Derivative-free Optimization (DFO)**

🔖 **Randomized Methods**

Publications

1. **C. Huang**, H. Song, J. Yang, and B. Zhou. "Error Analysis of Finite Difference Scheme for American Option Pricing under Regime-Switching with Jumps". In: *J. Comput. Appl. Math.* (2023). Accepted for publication.

2. Z. Gao, **C. Huang**, H. Song, and B. Zhou. "Projection and Contraction Method for Pricing American Option under Regime-Switching Model". In: *Journal of Jilin University (Science Edition)* 60 (2022), pp. 1090–1096.

Honors

Fellowships

2022   🔖 **Hong Kong PhD Fellowship Scheme (HKPFS)**, supported by Research Grants Committee (RGC) of Hong Kong, ref. PF21-56718.

2020, 2021   🔖 **First Class Scholarship**, awarded by Jilin University.

2020   🔖 **Zhao-Yue Scholarship**, awarded by School of Mathematics, Jilin University.

2019   🔖 **National Scholarship**, awarded by Ministry of Education, China.

Competition Awards

2021   🔖 **Finalist Award** of **Mathematical Contest in Modeling**, awarded by Society for Industrial and Applied Mathematics (SIAM).

Honors (continued)

2020   🔖 **First Prize** of **National College Students Mathematical Competition**, awarded by Chinese Mathematical Society (CMS).

Miscellaneous Experience

Student Affairs

2021 – 2022   🔖 **Academic Mentor for Freshmen**, School of Mathematics, Jilin University.
Guiding and monitoring the study of freshmen in School of Mathematics.

2020 – 2021   🔖 **President of Student Union**, School of Mathematics, Jilin University.
Coordinating all departments of student union and organizing various activities.

🔖 **Teaching Assistant**, School of Mathematics, Jilin University.
Conducting seminars on Mathematical Analysis and Advanced Linear Algebra for freshmen in School of Mathematics.

2019 – 2021   🔖 **Assistant Counselor**, School of Mathematics, Jilin University.
Giving freshmen useful guidance on study and life.

Extra-Curricular Activities

2021   🔖 **Interdisciplinary Training Program**, Jilin University.
Research on efficient numerical methods to solve put option pricing under regime-switching model.

2020   🔖 **Academic Exchange Program**, Cambridge & Jilin University.
Two-week online courses, awarded "Best Group Leader".

2019   🔖 **Poverty Alleviation Research**, Si-Yuan Program.
Two-week field research on: development of the wine industry for poverty alleviation in Hongsipu, and analysis of its future opportunities and challenges.

Skills

Languages   🔖 Native speaker for Mandarin, and level B2 for English.

Coding   🔖 Python, C, MATLAB, Git, LaTeX.

Misc.   🔖 Basketball, table tennis, calligraphy.