# HAOSHENG ZHOU

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# EDUCATION University of California, Santa Barbara (UCSB), PSTAT Department PhD in Applied Probability and Mathematical Statistics; New York University (NYU), CIMS (Courant Institute) Master in Mathematics; Sep 2020 – May 2022 Peking University (PKU), EECS Department Bachelor in Data Science and Big Data Technology (IT Finance); Sep 2016 – Jul 2020

# PUBLICATIONS AND PREPRINTS

- [3] R. Hu, J. Long, H. Zhou, Finite-Agent Stochastic Differential Games on Large Graphs: I. The Linear-Quadratic Case
- [2] H. Zhou, W. Lin, S.R. Labra, S.A. Lipton, J.A. Elman, N.J. Schork, A.V. Rangan, Detecting Boolean Asymmetric Relationships with a Loop Counting Technique and its Implications for Analyzing Heterogeneity within Gene Expression Datasets.

#### Accepted by IEEE/ACM Transactions on Computational Biology and Bioinformatics

[1] H. Zhou, J. Tu, Y. Kong, Approximation Algorithms and PTAS of the Minimum Dominating Set and the 3-Path Vertex Cover Problem on Unit Disk Graph.

# INVITED RESEARCH TALKS

Nov 2024: BIRS Workshop Modeling, Learning and Understanding: Modern Challenges between Financial Mathematics, Financial Technology and Financial Economics, Banff, Canada

Oct 2024: INFORMS Annual Meeting 2024, Seattle

Jul 2024: Summer School Optimal Transport through Midwest, UW-Madison, Wisconsin

Nov 2023: UCSB CFMAR Graduate Student Research Lightning Talk

# MEMBERSHIP AND SERVICE

Referee for Peer-Reviewed Journals: *Digital Finance* Jan 2024 - Jun 2024: Organizer of UCSB Reinforcement Learning Student Seminar

#### MENTORING

Sep 2024 - Present: UCSB CFMAR Undergraduate Lab Mentor, Topic: Financial Data Generation with Score-Based Diffusion Model

#### HONORS AND AWARDS

2023: UCSB Abraham Wald Memorial Prize
2022: UCSB Amazon Fellowship
2021: NYU GSAS Students for the Pathways to the PhD Program
2018 & 2019: PKU Academic Excellence Award
2018: PKU Scholarship for Outstanding Undergraduates

# ACADEMIC ACTIVITIES

Nov 2024: BIRS Workshop Modeling, Learning and Understanding: Modern Challenges between Financial Mathematics, Financial Technology and Financial Economics, Banff, Canada
Oct 2024: INFORMS Annual Meeting 2024, Seattle
Jul 2024: Summer School Optimal Transport through Midwest, UW-Madison, Wisconsin
Feb 2024: IMSI Workshop Decision Making and Uncertainty, Chicago
May 2022 - Jun 2022: PIMS-CRM Summer School in Probability, UBC, Vancouver, Canada
May 2019 - Dec 2019: NYU Shanghai DURF Project, Beijing, China

# TEACHING EXPERIENCES

TA experience in UCSB: PSTAT 213ABC (Year 2023 & 2024), PSTAT 160A, PSTAT 120AB, PSTAT 170, etc. TA experience in NYU: MATH-UA 009 (Winter 2022)

#### VOLUNTEER

Oct 2015 - Nov 2015: Volunteer Teacher, Hong Village, Anhui, China