

Baikun (Leon) Leng

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EDUCATION

The University of Washington, Foster School of Business

OM Ph.D. Student

Seattle, WA

Sep 2024 – May 2029

The Chinese University of Hong Kong, Shenzhen (CUHKSZ)

B.S. in Data Science and Big Data Technology

Shenzhen, China

Sep 2020 – May 2024

The University of California, Berkeley

Visiting Student

Berkeley, CA

Aug 2022 – May 2023

RESEARCH EXPERIENCE

Network Revenue Management problem Under the Markov Choice Model (In Progress)

Shenzhen, China

Supervisors: [Haixiang Lan](#), [Gallego Guillermo](#) & [Zizhuo Wang](#) & [Yinyu Ye](#), CUHKSZ

Aug 2023 – Present

- Built a Markov choice model for the network revenue management problem to characterize the trading process between buyers and sellers for multiple products, in which buyers continuously engage with sellers based on their bid prices until the transaction is completed or they exit the system
- Determined the optimal proportion of successful transactions for each product to maximize the overall revenue in the process

Fairness in Blockchain-Enabled Insurance Adoption (In Progress)

Remote

Supervisor: [Rowena Gan](#), Southern Methodist University

Jun 2023 – Present

- Aimed to optimize token distribution strategy among multiple agents such as insurance buyers, underwriters, and claim assessors in blockchain insurance, balancing between maximizing platform revenue and upholding different fairness standards within a mutual pool framework
- Conducted an in-depth analysis of top market-cap blockchain insurance projects, focusing on their whitepapers and economic models, which provided critical insights into the prevailing blockchain insurance ecosystem [[View Slides](#)]

Two-stage Pollution Regulation of Competitive Carbon Markets [[View Slides](#)]

Shenzhen, China

Supervisors: [Costas Courcoubetis](#) & [Jiaqi Lu](#), CUHKSZ

June 2022 – Sep 2022

- Aimed to construct an optimal firm policy in the carbon market based on investment, production, and pollution abatement
- Divided the policy into two stages: an investment stage (resulting in high/low abatement ability) and a production stage (in which firms can decide their optimal production quantity and pollution abatement level), to maximize whole process profits under the constraints of pollution regulation
- Utilized the concept of Nash equilibrium to delineate equilibrium boundaries in the investment stage for N firms as functions of emission cap and cost and visualized how the equilibrium outcomes shift by plotting the boundary curves in Python
- Conducted numerical tests via Python and theoretical proof via Mathematica to show the existence and the number of multi-equilibriums, revealing that the asymptotic behavior converges rapidly as the number of firms increases

SERVICES & ACTIVITIES

Crypto and Blockchain Economics Research Forum ([CBER](#))

Remote

Database Administrator

June 2023 – Present

- Created a database of blockchain-related papers from UTD-24 and top-5 Econ journals, detailing features such as journal name, relevant areas, keywords, and citation count

School of Data Science Undergraduate Seminar

Shenzhen, China

Founder & Organizer

Feb 2022 – Aug 2022

- Hosted globally renowned researchers and professors to deliver talks tailored for undergraduate students, aiming to educate, guide, and foster their understanding of diverse fields and cultivate their research interests [[View Past Talks](#)]