# Lingshu FANG

+86 19047096379 | Chongqing, China | lingshufang@link.cuhk.edu.cn

#### **EDUCATION**

## **National University of Singapore**

Aug. 2023 - Present

- Master of Science in Mathematics

## The Chinese University of Hong Kong, Shenzhen

Sep. 2019 - Jul. 2023

- Bachelor of Science in Applied Mathematics, First Class Honor

## University of California, Berkeley

Aug. 2021 - Dec. 2021

- GLOBE Program, one-semester visiting student

**Core Courses**: Calculus, Linear Algebra, Real Analysis, Complex Analysis, ODE, PDE, Statistics and Probability, Optimization, Mathematical Modeling, Game Theory, Numerical Analysis, Machine Learning

## INTERNSHIPS AND PROJECTS

Teaching Assistant Aug. 2024 - Present

At UCAS, Chongqing

- Drafted patent applications and prepared bid proposals as part of documentation responsibilities.
- Researched and developed curricula for AI education courses by studying AIGC (AI-Generated Content) and related topics.
- Gained experience in deep learning through participation in Kaggle programming competitions.

## Co-author an English Article and Published on College Magazine

Jan. 2021

- Co-authored a literature essay titled "Welcoming Ambiguity in English Language?" with Professor Michael Salter, published in Shaw College Magazine.

#### **Python Project: CE Camp Mini-Project**

Aug. 2020 - Aug. 2020

Led team project "Programming: Snake Game", awarded Third Prize in competition.

## **Public WeChat Account Manager**

Sep. 2019 - Aug. 2020

Art editor and activity organizer of Leadygo Entrepreneurial Team

- Edited weekly posts and organized campus activities on career planning.
- Mentored interns and coordinated the team's content and outreach efforts.

## **COURSE PROJECTS**

Machine Learning Aug. 2023 - Dec. 2023

- Analyzed UCI Heart Disease Database for the graduate ML course final project; (Course Grade: A)
- Performed data visualization, supervised learning (Regression, DT, Random Forest), and unsupervised learning (PCA, Neural Network) to the data, and concluded the relationship between different attributes and the target. (heart disease diagnosis)

## **Mathematical Modeling**

Sep. 2022 - Dec. 2022

- Designed a predictive model for the Korean population based on age-structure, birth, and death rates.
- Built an arbitrage detection program to devise options trading strategies for the S&P500 index.

## **ONLINE COURSES**

#### **Online Courses: Data Science**

Jan. 2022 - Present

- SQL for Data Science, University of California, Davis
- SQL Programming & Data Science with Python (Pandas), Datawhale

## **Online Courses: Machine Learning**

Jun. 2022 - Present

- Supervised Machine Learning: Regression and Classification, Andrew Ng, Stanford
- Advanced Learning Algorithms, Andrew Ng, Stanford
- Natural Language Processing with Classification and Vector Spaces, DeepLearning.Al

## **VOLUNTEERING ACTIVITIES**

## Shibanzhen Government, Chongqing

Jul. 2022 - Aug. 2022

- Helped prevent forest fire in remote villages
- Inspected the biggest local cold chain company and seafood market for epidemic control

## **SKILLS**

**Technical Skills** Python, PyTorch, MATLAB, SQL, LATEX, Microsoft Word, Excel, Photoshop

Language Proficiency Mandarin (Native), English (Fluent), Korean (Intermediate), Japanese (Beginner)

**Certification** Publishing Professional Technician Qualification Certificate