# Chongfeng Ling

### Education

## Xi'an Jiaotong-Liverpool University

Sept. 2017 - June 2022

Bachelor of Science in Applied Mathematics, First Class Honours (Expected)

Jiangsu, China

## The University of Liverpool

2022

Bachelor of Science (honors) in Applied Mathematics, First Class Honours (Expected)

Liverpool, UK

## Relevant Coursework

• Numerical Analysis

• Probability & Statistics

- Optimization Theory Differential Equations
- Operation Research
- Java Programming
- Abstract Algebra
- Population Dynamics

# Research Experience

## A graph-based hybrid-approach solver in the university timetable scheduling

Sept. 2021 – June 2022

Final Year Project

• Waiting to update.

# Queuing System Simulation

Apr. 2020 – May 2020

Research Associate Jiangsu, China

- Visited the operating conditions of a school restaurant, before modelling its passenger flow.
- Simulated queuing model based on Monte Carlo Method and visualized computing result on Matlab.

## Indoor Localization Based on Wi-Fi Fingerprinting and CNN

Jun. 2018 – Aug. 2018

Research Assistant, Summer Undergraduate Research Fellowships in XJTLU

Jiangsu, China

- Presented a new location fingerprinting database comprised of Wi-Fi received signal strength (RSS) and geomagnetic field intensity measured with multiple devices at a multi-floor building.
- Mapped RSS data for a reference point to an image-like, two-dimensional array and provided preliminary results of localization based on Convolutional Neural Network.
- Used a modified random way point model to efficiently generate continuous step traces imitating human walking.

## Internship and Project

## Mathartsys, Inc

Feb. 2021 - Aug. 2021

Algorithm Research (NLP) Intern

Shanghai, China

- Generated and maintained SQL and Shell script to pull daily data automatically.
- Explored ways to visualize and send a daily report of test results to team members using Jupyter, Pandas and Excel.
- Modified, segmented and augmented voice transcription text based on Regular Expression and Word Embedding.
- Built a multitasking NLP system with BERT and provided support for the company's downstream business including forum public opinion analysis (Sentiment Classification) and sales voice quality (Named Entity Recognition). The system has been applied in a series of BMW automobile retailing stores with satisfying outcomes.

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Contributor

- Created a open-source knowledge sharing platform on Github Page for undergraduates, including course notes, internship consultation, and graduate programs.
- Collaborated with team members using version control systems such as Git to organize modifications tasks.

#### Technical Skills

Languages: Python, Matlab, Java, LaTex, Git, SQL Technologies/Frameworks: PyTorch, Linux, GitHub

### Leadership / Extracurricular

XJTLU-Enactus Sept. 2017 – Apr. 2019

Publicity Director, Project Manager

- Initiated and organized bad-looking fruits orientations near the campus and market; guided groups of more than 30 students and educated them about fruit supply chain and value of unsightly food.
- Supervised the daily operation of the project including event hosting and public relation.