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 TheoryDifferential Equations

• Operation Research

• Java Programming

Abstract Algebra

• Population Dynamics

Research Experience

A hybrid-approach solver in university timetable scheduling

Sept. 2021 - June 2022

Final Year Project

Research Associate

• Waiting to update.

Queuing System Simulation

Apr. 2020 - May 2020

Jiangsu, China

- Conducted visits and research on the operating conditions and modelled passenger flow of a school restaurant.
- 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

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

Algorithm Research (NLP) Intern

Mathartsys, Inc

Feb. 2021 - Aug. 2021

• Maintained SQL and Shell script to pull daily data automatically and canonically.

Shanghai, China

- 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 project has provided services to many customers.

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.