

LUO, Hongfei

+086-13545230815
hluoao@connect.ust.hk

EDUCATION

The Hong Kong University of Science and Technology
Bachelor of Science

September 2022 - Present

- Major: Mathematics
- Minor: Biological Science

Lehigh University
Exchange Program

January 2025 - May 2025

- Major courses: Random Processes and Applications, Statistical Models in Data Science

RESEARCH EXPERIENCE

Computational Uncertainty Lab, Lehigh University
Undergraduate Research Assistant;

Bethlehem, PA, US
January 2025 - Present

Flu App Development Project

- Assisted in developing a responsive web application in Python for visualizing Influenza-like Illness (ILI) and hospitalization data within the U.S.
- Collaborated with another student to forecast the trajectory of infectious diseases by fitting statistical models to observed ILI and hospitalization data.
- Programmed data visualizations for interactive charts that display trends and comparisons.

The Hong Kong University of Science and Technology
Undergraduate Research Assistant;

Remote
June 2024 - August 2024

Modelling Actigraphy data using hidden Markov models

- Learned about the Eye Movement analysis with Hidden Markov Models (EMHMM) approach and applied methods similar to EMHMM to Actigraphy data (physical activity data) to research individual difference in circadian rhythms.
- Performed data analysis using EMHMM, which involved developing new functions in MATLAB for one-dimensional and two-dimensional data visualization.
- Identified key patterns and transitions in activity states.

AWARDS AND QUALIFICATIONS

- Dean's List
 - University Admission Scholarship
- Spring 2022-23
renewable for normative duration of study

ADDITIONAL SKILLS

- Technical: Python, R
- Language: Mandarin (Native), English (Fluent)