# Hongfei Luo

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#### **EDUCATION**

• The Hong Kong University of Science and Technology Bachelor of Science in Mathematics; Minor in Biological Science Hong Kong SAR Sept 2022 – Present

• Lehigh University

Exchange Program

Bethlehem, PA, USA Jan 2025 – May 2025

• Major Courses: Random Processes and Applications, Statistical Models in Data Science

#### RESEARCH EXPERIENCE

### • Computational Uncertainty Lab, Lehigh University

Bethlehem, PA, USA Jan 2025 – Present

Undergraduate Research Assistant

Jan 2025 – Present

- Assisted in developing a responsive web application in Python for visualizing Influenza-like Illness (ILI) and hospitalization data in 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 interactive data visualizations to display trends and comparisons.

## • The Hong Kong University of Science and Technology

Remote

Undergraduate Research Assistant

June 2024 - Aug 2024

- Applied Eye Movement analysis with Hidden Markov Models (EMHMM) to actigraphy data to study individual variance in circadian rhythms.
- Implemented new MATLAB functions for one- and two-dimensional data visualization.
- Identified key patterns and transitions in physical activity states using EMHMM.

# AWARDS AND QUALIFICATIONS

• Dean's List Spring 2022-23

• University Admission Scholarship (renewable for normative duration of study)

#### SKILLS

• Technical: Python, R

• Languages: Mandarin (Native), English (Fluent)