# Luoyu Dong

+86 173 3633 4395 — luoyudong2-c@my.cityu.edu.hk — Github:SeraphinaDong

## Education

- **City University of Hong Kong** *Sep 2024 – Jun 2025*
  M.Sc. in Multimedia Information Technology
- **Northeastern University (China)** *Sep 2018 – Jun 2022*
  B.Sc. in Electronic Information Engineering

## Work Experience

- **Technical Support, China Unicom Shanghai Branch** *Aug 2025 – Present*
  Built Python-based automated scripts to streamline report generation,and improving data accuracy for operational and strategic reporting.Conducted in-depth operational business analysis and trend visualization, delivering actionable insights to support departmental decision-making.
- **Teaching Assistant, iFlytek Spark-DataWhale Summer AI Practice Camp** *Jul 2024 – Aug 2024*
  Assisted students with problem-solving and debugging.Awarded second place in the Computer Vision track of the iFlytek Spark Summer AI Practice Camp, shared on CSDN.
- **Research Assistant, China University of Petroleum** *Jul 2022 – Mar 2024*
  Collaborated with the Beijing Supercomputing Center to develop models using MMYOLO, training and utilized Bash commands for scheduling and managing supercomputer resources. Reproduced and improved an LSTM-based internal wave recognition algorithm by optimizing hyperparameters and introducing data augmentation techniques in Laoshan Laboratory.
- **Algorithm Research Assistant, Luoyang Meicheng Internet Co., Ltd.** *Jan 2022 – Jun 2022*
  Developed a vending machine product recognition system using an improved YOLOv3 algorithm, integrated with multi-sensor data and model optimization to enhance recognition stability and accuracy. Also response for technical documentation.
- **Northeastern University Intelligent Hardware Laboratory** *September 2019 - June 2020*
  **U**se regular expressions and the library BeautifulSoup to crawl, process and clean web page data to ensure data accuracy and completeness. Developed Chinese word segmentation and word frequency statistics software based on jieba and PyQt, realizing word frequency statistical analysis of millions of text data and accurately analyze. Count the number of word occurrences and conduct visual analysis of high-frequency words. And be proficient in using Linux system for project deployment and management.

## Projects

- **Artificial Intelligence: Sentiment Classification Research on Texts (BERT)** *Nov 2024 – Dec 2024*
  Conducted a research project applying machine learning techniques to predict outcomes from textual data. Experimented with multiple models, including Linear Regression, Support Vector Machine (SVM), XGBoost, and Random Forest, achieving a baseline accuracy of 0.86.
  Further enhanced model performance using the BERT large model from hugging face, by leveraging its ability to capture contextual information, raising accuracy to 0.90. Fine-tuned the BERT model, resulting in a final accuracy of 0.93.
- **Research on ship image classification (CLIP model application)** *June 2023-September 2023*
  **U**sing the paddle framework, filter the ship images in the YOLO data set, perform labeling correction, size adjustment, and data enhancement, and modify the original yolo labels into text. Send the processed image data and text data into the CLIP model to improve the model's semantic understanding of ship images. Combine the advantages of the CLIP image-text model to improve the accuracy and efficiency of ship image classification tasks.

## Competition Experience

- **Northeastern University Math Modeling Competition** - Top 15%, 2nd place in university.
- **Turing Cup Programming Competition** - Top 20%, using C++ algorithms.
- **DataWhale Summer Camp CV Track** - 2nd place, shared insights on CSDN.
- **University "Three Innovations" Competition** - 3rd Place
- **University Awards:** Advanced Individual, Outstanding Student Leader, 3rd Place Scholarship