Lixin Xiu

Master Student at Department of Mathematical Informatics, IST, the University of Tokyo
lixin_xiu@outlook.com — 080-3205-1128

Programming: Python, PyTorch
Research interests: representation learning, machine learning and natural language processing.

EDUCATION

The University of Tokyo, Tokyo, Japan   Oct 2022 — Sep 2024 (Expected)
Master Student at Department of Mathematical Informatics, IST   Cumulative GPA: 2.94/3.0
Supervisor: Prof. Kumiko Tanaka-Ishii and Prof. Satoru Iwata

Xi'an Jiaotong University, Xi'an, China   Aug 2018 — Jul 2022
Bachelor of Engineering in Computer Science and Technology   Cumulative GPA: 3.56/4.3
Thesis Title: An Automatic Identification System for Traffic Signs Based on Deep Neural Networks

PUBLICATION

Conference Paper:

Xin Du*, Lixin Xiu*, and Kumiko Tanaka-Ishii. Bottleneck-Minimal Indexing for Generative Document Retrieval. Accepted to the Forty-first International Conference on Machine Learning (**ICML 2024 Oral**), to appear.

*: Equal Contribution

RESEARCH EXPERIENCE

Research Assistant   Oct 2022 — Present
Tanaka-Ishii Laboratory, Waseda University   Tokyo, Japan

- Manually replicated and evaluated classic word embedding models, such as GloVe.
- Participated in large language model (Llama-2) installation and inference on server.
- Downloaded and pre-processed multiple datasets for NLP-related research.

Teaching Assistant   Apr 2023 — Aug 2023
Department of Computer Science and Engineering, Waseda University   Tokyo, Japan

- Course Title: Programming A; Languages: Python and Java.
- Assisted the instructor with developing guides, lesson preparation, addressing student inquiries and grading assignments.

PROJECTS

Lab Research in few-shot image classification   Oct 2020 — Oct 2021
Faculty of Electronic and Information Engineering, Xi'an Jiaotong University   Xi'an, China

- Coded the data augmentation part of a few-shot learning classification network.
- Adjusted hyper-parameters, tested NN on datasets and realized the visualization of some layers for visual explanation.

Traffic Sign Recognition Contest, Summer Workshop 2021   May 2021 — Jul 2021
School of Computing, National University of Singapore   Singapore

- Coded and optimized neural networks for traffic sign recognition, as well as delivering presentations.
- Won the third place and got A performance.

AWARDS

Graduate Achievements
JASSO Scholarship   Oct 2022 — Mar 2023

Undergraduate Achievements
Outstanding Graduate of Xi'an Jiaotong University, Class of 2022   Jun 2022
Third Prize of the 12th Mathematics Competition of Chinese College Students   Dec 2020
Third-class Scholarship for 2019-2020 Academic Year (University-level)   Sep 2020