Kunhang Li

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Education

Department of Computer Science, The University of Tokyo Tokyo, Japan
Master in Computer Science *10/2023 – Present*

- Research Area: Natural Language Processing, Multimodality
- Supervisor: Yusuke Miyao
- Scholarship: UTokyo Fellowship (10/2023 – 9/2025)
- Courses: Reinforcement Learning, Applied Computer Graphics

College of Engineering, Peking University Beijing, China
Bachelor in Robotics *9/2019 – 7/2023*

- Research Area: Natural Language Processing, Multimodality
- Supervisor: Yansong Feng
- Courses: Introduction to Robotics, Machine Learning, Artificial Intelligence, Mathematical Foundations of the Information Age, Foundations of Natural Language Processing

Projects

Digital Observatory 4/2024 – Present
The University of Tokyo | Technical Staff
Supervisor: Yusuke Miyao, Professor, Graduate School of Information Science and Technology

- Abstract: Utilizing LLMs and other language technologies to predict the impact that news might have on the global supply chain.

Development of a multilingual CCG Parser 10/2023 – 3/2024
The University of Tokyo | Technical Staff
Supervisor: Yusuke Miyao, Professor, Graduate School of Information Science and Technology

- Abstract: As the only contributor, I implemented a high-performance multilingual CCG parser for both CCGBank and multilingual CCG treebanks from the lab.
- Highlights: Multilingual CCG supertagging and A* supertag-factored parsing; Treebanks processing, training and evaluation.
- Accomplishments: The project was published (link) with an easy-to-use interface.

Development of a CCG Parser 7/2022 – 9/2022
The University of Tokyo | Research Intern
Supervisor: Yusuke Miyao, Professor, Graduate School of Information Science and Technology

- Abstract: As the only contributor, I implemented a CCG parser comparable to SOTA ones from scratch, which paves the path to various kinds of phrase structure grammars (especially HPSG).
- Highlights: Hierarchical data class design; Neural CCG supertagging and parsing; Supertag-factored beam search and A* search.
- Accomplishments: The project was made public on GitHub (link) with an easy-to-use interface.

Semantic Analysis of Chinese Sports Instructions 7/2021 – 12/2022
Peking University | Research Assistant
Supervisor: Yansong Feng, Associate Professor, Wangxuan Institute of Computer Technology

- Abstract: This project aims to efficiently extract semantic information of bodily spatial states and changes from Chinese sports instructions.
- Highlights: Corpus construction of Chinese sports intructions; Annotation rule design (spatial semantic dependencies in predicate-argument structures); Annotation; Prediction system implementation (preprocessing, training, prediction and evaluation); Visualisation web service maintenance (built on brat).

Publications

- Motion Generation from Fine-grained Textual Descriptions.
  Kunhang Li, Yansong Feng.
  The Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING), 2024.

Experience

- Teaching: TA for Foundations of Natural Language Processing (Peking University, April 2023)

Skills

- Programming and Technologies: Python (PyTorch), MATLAB, C, C++, LaTeX, Markdown
- Natural Languages: Chinese (native), English (proficient), Japanese (basic), German (intermediate in reading)