

Junhao Liu

Contact Information	Donald Bren Hall University of California, Irvine Irvine, CA 92697	Email: junhao.liu@uci.edu Website: jhliu17.github.io Google Scholar GitHub
Education	University of California, Irvine, CA, United States <i>Ph.D.</i> , Computer Science, September 2022 - Present	GPA: 4.00
	University of Chinese Academy of Sciences, Beijing, China <i>M.E.</i> , Computer Technology in Natural Language Processing, June 2022	GPA: 3.79
	South China University of Technology, Guangzhou, China <i>B.E.</i> , Intelligence Science and Technology, June 2019	GPA: 3.79
Research and Work Experience	PhD Graduate Researcher Irvine, CA Perform research in the area of machine learning and artificial intelligence focusing on bioinformatics; investigate the development of advanced algorithms and models to enhance machine understanding and generative capabilities on multi-omics data.	Univerisity of California, Irvine September 2022 - Present
	Research Intern Hangzhou, China Worked on a multi-modal content analysis model for e-commerce review helpfulness prediction.	DAMO Academy, Alibaba September 2020 - February 2021
	Research Intern Beijing, China Worked on incorporating knowledge from multiple language data resources for cross-lingual machine reading comprehension.	Microsoft March 2020 - July 2020
	Research Assistant Shenzhen, China Worked on cross-modal generation and multi-modal learning.	Chinese Academy of Sciences March 2019 - September 2019
	Engineering Intern Guangzhou, China Worked on car fine-grained detection and driver action classification.	Guangzhou Automobile Group September 2018 - February 2019
Awards and Honor	Selected Scholarships Dean's Award, ICS, UC Irvine Dean's Fellowship, ECE, UC San Diego National Scholarship of China AAAI 2020 Student Scholarship Endress + Hauser SC China Scholarship	February 2022 February 2022 November 2021 December 2020 December 2017
	Selected Awards Merit Student of UCAS Award & Outstanding Student Leader Award Special Award of the President of SIAT, CAS 3rd Place, the Byte Cup 2018 International Machine Learning Contest Honorable Mention, the MCM/ICM Contest (The Mathematical Contest in Modeling / The Interdisciplinary Contest in Modeling) Merit Student of SCUT Award & Outstanding Student Leader Award 2nd Prize, the Mathematical Contest in Modeling of China (Guangdong)	2021, 2022 2020 2018 2018 2016, 2018 2018

Professional Activities

Program Committee
IEEE AIMHC 2024

Peer Review

NeurIPS 2024, ACL Rolling Review, COLING 2024, ACL 2023, EMNLP 2022, ACL 2022, AAAI 2022, ACL 2021, COLING 2020, AAAI 2020, IEEE Transactions on Cognitive and Developmental Systems

Teaching Experience

Teaching Assistant, Introduction to Discrete Mathematics, UC Irvine Winter 2023
Teaching Assistant, Introduction of Machine Learning, UC Irvine Fall 2022

Publications

Prashant S. Emani et al.. Single-Cell Genomics and Regulatory Networks for 388 Human Brains. *Science*, 2024.

Yunshui Li, **Junhao Liu**, Min Yang, Chengming Li. Self-Distillation with Meta Learning for Knowledge Graph Completion. *Findings of the Association for Computational Linguistics (EMNLP)*, 2022.

Junhao Liu, Zhen Hai, Min Yang and Lidong Bing. Multi-perspective Coherent Reasoning for Helpfulness Prediction of Multimodal Reviews. *The Annual Meeting of the Association for Computational Linguistics (ACL)*, 2021.

Junhao Liu, Kai Wang, Chunpu Xu, Zhou Zhao, Ruifeng Xu, Ying Shen and Min Yang. Interactive Dual Generative Adversarial Networks for Image Captioning. *The AAAI Conference on Artificial Intelligence (AAAI)*, 2020.

Junhao Liu, Linjun Shou, Jian Pei, Ming Gong, Min Yang and Daxin Jiang. Cross-lingual Machine Reading Comprehension with Language Branch Knowledge Distillation. *The International Conference on Computational Linguistics (COLING)*, 2020.

Junhao Liu, Min Yang, Chengming Li, Ruifeng Xu. Improving Cross-modal Image-Text Retrieval with Teacher-Student Learning. *IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)*, 2020.

Jian Wang, **Junhao Liu**, Wei Bi, Xiaojiang Liu, Ruifeng Xu, Kejing He and Min Yang. Dual Dynamic Memory Network for End-to-End Multi-turn Task-oriented Dialog Systems. *The International Conference on Computational Linguistics (COLING)*, 2020.

Jian Wang, **Junhao Liu**, Wei Bi, Xiaojiang Liu, Ruifeng Xu, Kejing He and Min Yang. Improving Knowledge-aware Dialogue Generation via Knowledge Base Question Answering. *The AAAI Conference on Artificial Intelligence (AAAI)*, 2020.

Min Yang, **Junhao Liu**, Ying Shen, Zhou Zhao, Xiaojun Chen, Qingyao Wu and Chengming Li. An Ensemble of Generation-and Retrieval-Based Image Captioning with Dual Generator Generative Adversarial Network. *IEEE Transactions on Image Processing (TIP)*, 2020.

Projects

Image Paragraph Generation System: A demo system for generating long descriptions based on the observed image.

Emoji to Lang: An open-source library for helping NLP researchers clean their data by translating Emoji to any human language.

News Title Generation: Byte Cup 2018 International Machine Learning Contest.

Matrix Stitcher: An open-source library for taping matrix elementary transforms and conducting matrix analysis.

Languages and Skills

Programming: Python, C/C++, Rust, Java, Bash, Git, CMake, L^AT_EX

Libraries: PyTorch, TensorFlow, OpenAI Triton, Scikit-learn, LibTorch, JAX, CUDA

Languages: Mandarin Chinese, English