JINYUAN LI

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EDUCATION

MSc Tianjin University   Tianjin, China 📍   📅 Sept 2022 ▸ Jan 2025 (Expected)

Major in Computer Technology

I am being mentored by Professor Gang Pan, specializing in the field of **Multimodal Learning**.

B.S. Taiyuan University of Technology (211 Project)   Taiyuan, China 📍   📅 Sept 2018 ▸ Jul 2022

Major in Information and Computing Science; **GPA: 90.53/100**; **Major GPA: 93.64/100**

Courses: Advanced Algebra (100), Numerical Analysis (98), Probability Theory (96), Mathematical Analysis (93),

Fuzzy Mathematics (93), Operating System (97), High Performance Computing (96), Data Structures (92)

PUBLICATIONS

1. LLMs as Bridges: Reformulating Grounded Multimodal Named Entity Recognition.

   Findings of the Association for Computational Linguistics: **ACL** 2024

   Jinyuan Li, Han Li, Di Sun, Jiahao Wang, Wenkun Zhang, Zan Wang, Gang Pan

   - Reformulating GMNER task at the macro level and unifying Visual Grounding and Entity Grounding.
   - All 14 variants of RiVEG achieve new SoTA performance on the Twitter-GMNER dataset.

   Code: *https://github.com/JinYuanLi0012/RiVEG*

2. Prompting ChatGPT in MNER: Enhanced Multimodal Named Entity Recognition with Auxiliary
   Refined Knowledge.   Findings of the Association for Computational Linguistics: **EMNLP** 2023

   Jinyuan Li, Han Li, Zhuo Pan, Di Sun, Jiahao Wang, Wenkun Zhang, Gang Pan

   - Activating the potential of large language models in Multimodal Named Entity Recognition.
   - SoTA results on Twitter-2015 and Twitter-2017 datasets and stronger generalization capability.

   Code: *https://github.com/JinYuanLi0012/PGIM*

3. Advancing Grounded Multimodal Named Entity Recognition via LLM-Based Reformulation and Refined
   Knowledge Box-Based Segmentation.   Under review by **IEEE Transactions on Multimedia**

   Jinyuan Li, Ziyan Li, Han Li, Jianfei Yu, Rui Xia, Di Sun, Gang Pan

   - Proposing new SMNER task and constructing corresponding Twitter-SMNER dataset.
   - Demonstrating the feasibility of using box prompt-based SAM to empower any GMNER model with the
     ability to accomplish the SMNER task.

   Code: *https://github.com/JinYuanLi0012/RiVEG*

4. CATN: A Context-Aggregated Transformer Network for Blind Image Inpainting.

   Under review by **ACM Multimedia 2024**

   Jiahao Wang, **Jinyuan Li**, Gang Pan, Di Sun, Jiawan Zhang

   - Contributing to dataset construction, article writing, and revision as a collaborator.

5. DSTFuse: Enhancing Deblurring via Style Transfer for Visible and Infrared Image Fusion.

   Submitted to **WACV 2025**

   Yonglu Liu, Gang Pan, Zhenjun Han, Di Sun, **Jinyuan Li**, Jiahao Wang

   - Independently guiding a junior student to complete a full-process research from scratch.

WORK EXPERIENCE

Research Intern

Baidu, Beijing 📍 🗓 Apr 2024 ▸ Now

Participate in research and development of PaddleOCR:

- Exploring the potential of multimodal vision-language models for visual document understanding.

AWARDS AND HONORS

Second-class Academic Scholarship of Tianjin University 🗓 2022 & 2023

Outstanding Students of Taiyuan University of Technology (Top 2%) 🗓 2021

Provincial Second Prize in the National College Student Mathematical Modeling Competition 🗓 2020

Academic Excellence Scholarship of Taiyuan University of Technology 🗓 2019 & 2020

Outstanding Student Cadre of Taiyuan University of Technology 🗓 2018

SERVICE

Reviewer: ACL 2024, ACM MM 2024, EMNLP 2024, ACL ARR 2024, IEEE TMM, Pattern Recognition

Teaching Assistant: Advanced Computer Vision (Postgraduate), Tianjin University, Fall 2023