

JINYUAN LI (李金源)

✉ jinyuanli0012@gmail.com · 🔗 jinyuanli0012.github.io

EDUCATION

MSc Tianjin University

📅 Sept 2022 ▶ Jan 2025

Major in Computer Technology (**China National Scholarship, Top 1%**)

Advisor: Prof. [Gang Pan](#)

Major GPA: 91.1/100; GPA: 88.5/100

Research Topics: Multimodal Learning / Natural Language Processing / Computer Vision

Thesis: Multimodal Named Entity Recognition, Grounding, and Segmentation for Social Media Data

B.S. Taiyuan University of Technology

📅 Sept 2018 ▶ Jul 2022

Major in Applied Mathematics (First Year) & Information and Computing Science (Subsequent Years)

Major GPA: 93.6/100; GPA: 90.5/100

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), etc.

RESEARCH EXPERIENCE

[♠ represents the students I mentor]

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

Code: <https://github.com/JinYuanLi0012/RiVEG>

- Reformulating the overall task at the macro level and unifying visual grounding and entity grounding.
- Proposing the most accurate framework in this field to date, achieving an 11% performance improvement.

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

Code: <https://github.com/JinYuanLi0012/PGIM>

- Activating the potential of large language models in multimodal named entity recognition.
- Being cited nearly 40 times within a year as a state-of-the-art method in this field.

3. [AFAN: An Attention-Driven Forgery Adversarial Network for Blind Image Inpainting](#).

IEEE Transactions on Multimedia

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

- Better image reconstruct capability based on rich context information of adjacent tokens.
- Proposing a high-frequency omni-dimensional dynamic convolution to improve the detail representation.

Preprints.

1. [Advancing Grounded Multimodal Named Entity Recognition via LLM-Based Reformulation and Box-Based Segmentation](#). Under review by **IEEE Transactions on Multimedia**

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

Code: <https://github.com/JinYuanLi0012/RiVEG>

- Proposing new SMNER task and constructing the currently only dataset available for this scenario.
- The first pixel-level multimodal information extraction method for image-text pairs on social media.

2. [VP-MEL: Visual Prompts Guided Multimodal Entity Linking](#).

Under review by **ACL ARR December (ACL 2025)**

Hongze Mi[✉], Jinyuan Li, Xuying Zhang[✉], Haoran Cheng[✉], Jiahao Wang, Di Sun, Gang Pan

- Proposing a new entity linking task that relies on visual mentions instead of traditional textual mentions.
- Constructing the new benchmark dataset VP-Wiki and automated data annotation pipelines.
- Beating all existing multimodal entity linking methods by up to 20% in the new setup.

3. [DSTFuse: Enhancing Deblurring via Style Transfer for Visible and Infrared Image Fusion](#).

Preprint, 2024

Gang Pan, Yonglu Liu[✉], Jinyuan Li, Zhenjun Han, Jiahao Wang, Di Sun

- Guiding a junior student to complete a full-process research.
- The first attempt to integrate visible and infrared light to enhance image visibility.

WORK EXPERIENCE

Research Intern

[Baidu OCR Team](#), Beijing 

 Apr 2024 ▶ Jun 2024

Participate in research and development of [PaddleOCR](#) (With 46K+ stars on GitHub):

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

AWARDS AND HONORS

China National Scholarship (Top 1%, Ranked #1 in CS Department)	 2024
First-class Academic Scholarship of Tianjin University (Top 3%, Ranked #1 in CS Department)	 2024
Outstanding Students of Tianjin University (Top 3%, Ranked #1 in CS Department)	 2024
Second-class Academic Scholarship of Tianjin University	 2022 & 2023
Outstanding Students of Taiyuan University of Technology (Top 2%, 3/128)	 2021
Academic Excellence Scholarship of Taiyuan University of Technology	 2020 & 2021
Provincial Second Prize in the National College Student Mathematical Modeling Competition	 2020
Excellent Academic Progress Student of Taiyuan University of Technology	 2020
Outstanding Student Cadre of Taiyuan University of Technology	 2019

SERVICE

Reviewer: ACL 2024, EMNLP 2024, NAACL 2025, ACL ARR 2024, ACM MM 2024, WACV 2025, PR, TMM

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