

EDUCATION

University of Hamburg

Ph.D. in Computer Science, Advisor: Prof. Dr. Chris Biemann

Hamburg, Germany

2021–2024

- Thesis: “Multimodal Representation Learning: Understanding and Leveraging”

South China University of Technology

M.S. in Computer Science, GPA: 3.70/4.00

Guangzhou, China

2016–2019

- Thesis: “Research on Abstractive Summarization”

South China University of Technology

B.S. in Computer Science, GPA: 3.40/4.00

Guangzhou, China

2012–2016

- Thesis: “Spatio-temporal Data Storage and Mining Systems”

EXPERIENCE

The Chinese Academy of Sciences

Visiting Researcher, Advisors: Prof. Dr. Xingshan Li

Beijing, China

Dec. 2022 - Mar. 2023

- Language Models
- Understand Language Models from Cognition Perspective: Regression and Prediction

The Hong Kong Polytechnic University

Research Assistant, Advisor: Prof. Dr. Wenjie Li

Hong Kong SAR, China

Oct. 2018 - Aug. 2019

- Summarization
- Fusing External Language Models in the Abstractive Summarization

The Chinese Academy of Sciences

Visiting Student Researcher, Advisor: Prof. Dr. Min Yang

Shenzhen, China

Mar. 2018 - Oct. 2018

- Summarization
- Generative Adversarial Network for Abstractive Text Summarization with Multi-task Constraint

PUBLICATIONS

1. Xiaoyu Li*, **Xintong Wang***, Xingshan Li, and Chris Biemann, “Probe Language Models from Cognition Prospective”, *Under Review (equal contribution)*. May 2023
2. **Xintong Wang**, Xiaoyu Li, Liang Ding, Sanyuan Zhao, and Chris Biemann, “Unsupervised Dual Constraint Contrastive Cross-modal Retrieval”, *Under Review*. April 2023
3. Anton Orell Wiehe, Florian Schneider, Sebastian Blank, **Xintong Wang**, Hans-Peter Zorn, and Chris Biemann, “Language over Labels: Contrastive Language Supervision Exceeds Purely Label-Supervised Classification Performance on Chest X-Rays”, *Proceedings of the 2022 Asia-Pacific Chapter of the Association for Computational Linguistics: Student Research Workshop (ACL-IJCNLP SRW)*. November 2022
4. **Xintong Wang***, Florian Schneider*, Özge Alacam, Prateek Chaudhury, Chris Biemann, “MOTIF: Contextualized Images for Complex Words to Improve Human Reading”, *Proceedings of the 13th Edition of its Language Resources and Evaluation Conference (LREC)*, June 2022

5. Florian Schneider, Özge Alacam, **Xintong Wang**, and Chris Biemann, “Towards Multi-Modal Text-Image Retrieval to improve Human Reading”, *Proceedings of the 2021 Conference of the North American Chapter of the Association for Computational Linguistics: Student Research Workshop (NAACL SRW)*. June 2021
6. Min Yang, **Xintong Wang**, Yao Lu, Jianming Lv, Ying Shen, and Chengming Li, “Plausibility-promoting Generative Adversarial Network for Abstractive Text Summarization with Multi-task Constraint”, *Information Sciences*, 521 (2020): 46-61
7. Jianming Lv, and **Xintong Wang**, “Cross-dataset person re-identification using similarity preserved generative adversarial networks”, *Proceedings of the 11th International Conference on Knowledge Science, Engineering and Management (KSEM)*, August 2018
8. Jianming Lv, Qing Li, Qinghui Sun, and **Xintong Wang**, “T-CONV: A convolutional neural network for multi-scale taxi trajectory prediction”, *Proceedings of the 2018 IEEE international conference on big data and smart computing (bigcomp)*, January 2018
9. Jianming Lv, **Xintong Wang**, Fengtao Huang, Junjie Yang, Tianfeng Wu, and Qifa Yan, “TREST: A Hadoop Based Distributed Mobile Trajectory Retrieval System”, *Proceedings of the 2016 IEEE First International Conference on Data Science in Cyberspace (DSC)*, June 2016

TEACHING

- **Project Mentor** at University of Hamburg Summer 2022/2023
Master Project Web Interfaces for Language Processing Systems
- **Co-instructor** at University of Hamburg Winter 2020
Master Course Natural Language Processing for Web

SUPVERSION

Master Theses

- **Fabian Meyer** MSc, at Universität Hamburg 16.04.2023
Thesis: On the Potential and Limits of Zero-Shot Out-of-Distribution of Detection
- **Anton Orell Wiehe** MSc, at Universität Hamburg 10.07.2022
Thesis: Domain Adaptation for Multi-Modal Foundation Models
- **Matthew Ng Cher-Wai** MSc, at Universität Hamburg 06.06.2022
Thesis: Multi-modal Fictional Backstory Generation using Transformer-Aspect-Backstory Generator
- **Ankit Srivastava** MSc, at Universität Hamburg 13.03.2022
Thesis: Complex Word Identification for Language Learners

Research Assistants

- **Xiaoyu Li** MSc, at Technische Universität Berlin, Berlin, Germany 01.10.2022
Topic: Dual Constraint Cross-modal Retrieval
- **Prateek Chaudhury** BSc, at Indian Institute of Technology Delhi, New Delhi, India (Remote Intern) 31.08.2021
Topic: Reading Material Analysis for Second Language Learners

SKILLS

- **Programming Languages:** Python, Java, C++, C
- **Toolkit for Deep Learning:** PyTorch, TensorFlow, Numpy, Pandas, Matplotlib, NLTK, spaCy, Scikit-learn

LANGUAGES

- **Chinese:** Native speaker
- **English:** Highly proficient in spoken and written (C1)
- **German:** Basic communication skills (A2)

PROJECTS

See full list of projects on www.crossmodal-learning.org/home.html

- SFB TRR 169 Project C7: Crossmodal Learning for Improving Human Reading
Learning to Read, Crossmodal Learning

SCHOLARSHIPS AND AWARDS

- South China University of Technology, Graduate Research Scholarships 2016–2019
- South China University of Technology, Bachelor Scholarships 2013–2016
- Tencent Research Scholarship 2016–2016
- Honorable Mention of Mathematical Contest In Modeling Certificate of Achievement 2015

PROFESSIONAL ACTIVITIES

- Talk at the University of Wuppertal 2023
Probing Large Language Models (LLMs) for Predicting Human Behavioral Data
- Reviewer for ACL Rolling Review (ARR) 2021–2022
Crossmodal Learning, Machine Translation
- Reviewer for Journal TALLIP 2020–2021
Natural Language Processing
- Reviewer for Journal IEEE Access 2020–2021
Computer Vision, Natural Language Processing
- Conference Reviewer: ACL 2023
Multimodal Learning
- Conference Reviewer: ACL, EMNLP, AACL-IJCNLP, EACL 2022
Cognitive Modeling and Psycholinguistics, Summarization, Multimodal
- Conference Reviewer: ACL, NAACL, IJCAI/Senior Program Committee 2021
Summarization, Generation, Crossmodal Learning
- Conference Reviewer: ACL, EMNLP, AACL, IJCNLP 2020
Summarization, Generation, Multidisciplinary
- Conference Reviewer: EMNLP, NLPCC 2019
Summarization, Conversational Bot/QA/IR/Dialogue