Xintong Wang

Last update: June 7th, 2023

EDUCATION

University of Hamburg

Hamburg, Germany

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

2020-2024

- Thesis: "Multimodal Representation Learning: Understanding and Leveraging"

South China University of Technology

Guangzhou, China

2016-2019

- Thesis: "Research on Abstractive Summarization"

South China University of Technology

Guangzhou, China

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

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

2012-2016

- Thesis: "Spatio-temporal Data Storage and Mining Systems"

EXPERIENCE

The Chinese Academy of Sciences

Beijing, China

Visiting Researcher, Advisors: Prof. Dr. Xingshan Li Dec. 2022 - Mar. 2023

- Language Models

- Understand Language Models from Cognition Perspective: Regression and Prediction

The Hong Kong Polytechnic University

Hong Kong SAR, China

Research Assistant, Advisor: Prof. Dr. Wenjie Li

Oct. 2018 - Aug. 2019

- Summarization

- Fusing External Language Models in the Abstractive Summarization

The Chinese Academy of Sciences

Shenzhen, China

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

Mar. 2018 - Oct. 2018

- Summarization

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

Publications

- 1. **Xintong Wang**, Xiaoyu Li, Xingshan Li, and Chris Biemann, "Probing Large Language Models from A Human Behavioral Prospective", *Under Review. June 2023*
- 2. **Xintong Wang**, Xiaoyu Li, Liang Ding, Sanyuan Zhao, and Chris Biemann, "Using Unsupervised Dual Constraint Contrastive Learning for Cross-modal Retrieval", *Proceedings of the 26th European Conference on Artificial Intelligence (ECAI). September 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 (AACL-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), Auguest 2018
- 8. Jianming Lv, Qing Li, Qinghui Sun, and Xintong Wang, "T-CONV: A Convolutional Neural Network for Multiscale 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 Master Course Natural Language Processing for Web Winter 2020

Supversion

Master Theses

• Fabian Meyer MSc, at Universität Hamburg 16.04.2023 Thesis: On the Potential and Limists 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 06.06.2022Thesis: Multi-modal Fictional Backstory Generation using Transformer-Aspect-Backstory Generator • Ankit Srivastava MSc, at Universität Hamburg

Thesis: Complex Word Identification for Language Learners

13.03.2022

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 LANGUAGES

- Programming Languages: Python, Java, C++, C
- Toolkit for Deep Learning: PyTorch, TensorFlow, Numpy, Pandas, Matplotlib, NLTK, spaCy, Scikit-learn
- 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 South China University of Technology, Bachelor Scholarships Tencent Research Scholarship Honorable Mention of Mathematical Contest In Modeling Certificate of Achievement 	2016–2019 2013–2016 2016–2016 2015
Professional Activities	
• Invited talk at the University of Wuppertal Probing Large Language Models (LLMs) for Predicting Human Behavioral Data	2023
• Conference Reviewer: ACL, ACM MM, ECAI, AACL-IJCNLP Multimodal Learning	2023
• Conference Reviewer: ACL, EMNLP, AACL-IJCNLP, EACL Cognitive Modeling and Psycholinguistics, Summarization, Multimodal	2022
• Conference Reviewer: ACL, NAACL, IJCAI/Senior Program Committee Summarization, Generation, Crossmodal Learning	2021
• Conference Reviewer: ACL, EMNLP, AACL, IJCNLP Summarization, Generation, Multidisciplinary	2020
• Conference Reviewer: EMNLP, NLPCC Summarization, Conversational Bot/QA/IR/Dialogue	2019
• Reviewer for ACL Rolling Review (ARR) Crossmodal Learning, Machine Translation	2021-2023
• Reviewer for Journal TALLIP Natural Language Processing	2020-2021
• Reviewer for Journal IEEE Access Computer Vision, Natural Language Processing	2020-2021