Xintong Wang

Last update: Apr. 4th, 2023

EDUCATION

University of Hamburg

Hamburg, Germany

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

2021-2024

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

South China University of Technology

Guangzhou, China

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

2016-2019

- Thesis: "Research on Abstractive Summarization"

South China University of Technology

Guangzhou, China

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

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, Sanyuan Zhao, and Chris Biemann, "Unsupervised Dual Constraint Cross-modal Retrieval", *Under Review. April 2023*
- 2. 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
- 3. **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
- 4. 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*

- 5. 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
- 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
- 7. 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
- 8. 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

Master Project Web Interfaces for Language Processing Systems

 $Summer\ 2022/2023$

• Co-instructor at University of Hamburg

Master Course Natural Language Processing for Web

Winter 2020

Supversion

Master Theses

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

Internships

• Xiaoyu Li MSc, at Beijing Institute of Technology, Beijing, China (Remote Intern)	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	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	
• 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, Summariaztion, 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
$Summarization,\ Conversational\ Bot/QA/IR/Dialogue$	