

## EDUCATION

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### 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

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### 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

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1. **Xintong Wang**, Xiaoyu Li, Liang Ding, Qingqing Qu, Xingshan Li, and Chris Biemann, “Probe Language Models from Cognition Prospective”, *Under Review*. June 2023
2. **Xintong Wang**, Xiaoyu Li, Liang Ding, Sanyuan Zhao, and Chris Biemann, “SUCCESSOR: 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 (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)*, 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

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- **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

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### 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

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

## LANGUAGES

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

## PROJECTS

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See full list of projects on [www.crossmodal-learning.org/home.html](http://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

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|------------------------------------------------------------------------------------|-----------|
| • 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

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