

EDUCATION

University of Hamburg

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

- Thesis: “Multimodal Representation Learning: Understanding and Leveraging”
- Expected Grade: summa cum laude (with distinction)

Hamburg, Germany

Apr. 2021 - Dec. 2025

South China University of Technology

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

- Thesis: “Research on Abstractive Summarization”

Guangzhou, China

Sept. 2016 - July 2019

South China University of Technology

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

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

Guangzhou, China

Sept. 2012 - June 2016

EXPERIENCE

CBU Technology Department, Taobao & Tmall Group

Senior Agentic AI Applied Scientist

- Agentic AI
- Led the deployment of trillion-parameter-scale RL models, and architected a multimodal agent collaboration framework for coordinated perception, reasoning, and action

Hangzhou, China

Dec. 2025 - Current

Hub of Computing & Data Science, University of Hamburg

Researcher and Consultant, Director: Prof. Dr. Chris Biemann

- Large Vision-Language Models
- Specializing in Vision and Multimodal Learning, Fostering Interdisciplinary Research across Modalities

Hamburg, Germany

Jan. 2025 - Current

AI Business, Alibaba International Digital Commerce Group

Research Intern, Mentor: Dr. Longyue Wang, Senior Algorithm Expert

- Large Vision-Language Models
- Benchmarking Multilingual Vision-Language Translation and Evaluation Protocols

Hangzhou, China

Dec. 2024 - Dec. 2025

The Chinese Academy of Sciences

Visiting Researcher, Advisor: Prof. Dr. Xingshan Li

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

Beijing, China

Dec. 2022 - Mar. 2023

Language Technology Group, University of Hamburg

Research Associate, Advisor: Prof. Dr. Chris Biemann

- Cross-modal Learning
- Cross-modal Learning for Improving Human Learning to Read

Hamburg, Germany

May 2020 - Current

The Hong Kong Polytechnic University

Research Assistant, Advisor: Prof. Dr. Wenjie Li

- Summarization

Hong Kong, China

Oct. 2018 - Aug. 2019

The Chinese Academy of Sciences

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

– Summarization

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

Shenzhen, China

Mar. 2018 - Oct. 2018

PUBLICATIONS

1. Yunxin Li, Zhenyu Liu, Zitao Li, Xuanyu Zhang, Zhenran Xu, Xinyu Chen, Haoyuan Shi, Shenyuan Jiang, **Xintong Wang**, Jifang Wang, Shouzheng Huang, Xinping Zhao, Borui Jiang, Lanqing Hong, Longyue Wang, Zhuotao Tian, Baoxing Huai, Wenhan Luo, Zheng Zhang, Baotian Hu, and Min Zhang, “Perception, Reason, Think, and Plan: A Survey on Large Multimodal Reasoning Models”, *ACM Computing Surveys Under Review*, October 2025. [[LVLM Multimodal&Reasoning](#)]
2. **Xintong Wang**, Jingheng Pan, Yixiao Liu, Xiaohu Zhao, Chenyang Lyu, Minghao Wu, Chris Biemann, Longyue Wang, Linlong Xu, Weihua Luo, and Kaifu Zhang, “Rethinking Multilingual Vision-Language Translation: Dataset, Evaluation, and Adaptation”, *ACL ARR Under Review*. October 2025 [[LVLM Multimodal&Multilingual](#)]
3. **Xintong Wang**, Jingheng Pan, Yixiao Liu, Longyue Wang, and Chris Biemann, “Bridging Visual Concepts: Conceptual Alignment for Ambiguity Resolution in Multimodal Translation”, *ACL ARR Under Review*. October 2025 [[LVLM Multimodal&Multilingual](#)]
4. Yanfang Zhou, Yuntao Liu, Xiaodong Li, Tianyu Chen, Yongqiang Zhao, Qingyu Wu, **Xintong Wang**, Jinlong Tian, Zhenyu Li, and Xinhai Xu, “DC³PA: A Dual-Chain Cognitive Control-Driven Planning Agent for Open-World Environments”, *AAAI Under Review*. August 2025 [[LLM Agent](#)]
5. Minghao Wu, Weixuan Wang, Sinuo Liu, Huifeng Yin, **Xintong Wang**, Yu Zhao, Chenyang Lyu, Longyue Wang, Weihua Luo, and Kaifu Zhang, “The Bitter Lesson Learned from 2,000+ Multilingual Benchmarks”, *ACL ARR Under Review*. July 2025 [[LLM Multilingual](#)]
6. **Xintong Wang**, Yixiao Liu, Jingheng Pan, Liang Ding, Longyue Wang, and Chris Biemann, “Chinese Toxic Language Mitigation via Sentiment Polarity Consistent Rewrites”, *The 2025 Conference on Empirical Methods in Natural Language Processing (EMNLP)*. August 2025 (**Core Rank A* and CCF-B**) [[LLM Benchmark&Safety](#)]
7. **Xintong Wang**, Jingheng Pan, Liang Ding, Longyue Wang, Longqin Jiang, Xingshan Li, and Chris Biemann, “Cog-Steer: Cognition-Inspired Selective Layer Intervention for Efficiently Steering Large Language Models”, *Findings of the Association for Computational Linguistics (ACL)*. August 2025 (**Core Rank A* and CCF-A**) [[LLM Interpretability&Efficiency&Safety](#)]
8. Yanfang Zhou, Yuntao Liu, Xiaodong Li, Yongqiang Zhao, **Xintong Wang**, Qingyu Wu, Jinlong Tian, Zhenyu Li, Xinhai Xu, “Metagent-P: A Neuro-Symbolic Planning Agent with Metacognition for Open Worlds”, *Findings of the Association for Computational Linguistics (ACL)*. August 2025 (**Core Rank A* and CCF-A**) [[LLM Agent](#)]
9. Yanfang Zhou, Xiaodong Li, Yuntao Liu, Yongqiang Zhao, **Xintong Wang**, Zhenyu Li, Jinlong Tian, Xinhai Xu, “M2PA: A Multi-Memory Planning Agent for Open Worlds Inspired by Cognitive Theory”, *Findings of the Association for Computational Linguistics (ACL)*. August 2025 (**Core Rank A* and CCF-A**) [[LLM Agent](#)]
10. Daryna Dementieva, Daniil Moskovskiy, Nikolai Babakov, Abinew Ali Ayele, Naqee Rizwa, Florian Schneider, **Xintong Wang**, Seid Muhie Yimam, Dmitry Ustalov, Elisei Stakovskii, Alisa Smirnova, Ashraf Elnagar, Animesh Mukherjee and Alexander Panchenko, “Multilingual and Explainable Text Detoxification with Parallel Data”, *Proceedings of the 31st International Conference on Computational Linguistics (COLING)*. January 2025 (**Core Rank A and CCF-B**) [[LLM Multilingual&Safety](#)]
11. **Xintong Wang**, Jingheng Pan, Liang Ding, and Chris Biemann, “Mitigating Hallucinations in Large Vision-Language Models with Instruction Contrastive Decoding”, *Findings of the Association for Computational Linguistics (ACL)*. August 2024 (**Core Rank A* and CCF-A**) [[LVLM Hallucination](#)]

12. Abinew Ali Ayele, Nikolay Babakov, Janek Bevendorff, Xavier Bonet Casals, Berta Chulvi, Daryna Dementieva, Ashaf Elnagar, Dayne Freitag, Maik Fröbe, Damir Korenčić, Maximilian Mayerl, Daniil Moskovskiy, Animesh Mukherjee, Alexander Panchenko, Martin Potthast, Francisco Manuel Rangel, Naqee Rizwan, Paolo Rosso, Florian Schneider, Alisa Smirnova, Efstathios Stamatatos, Elisei Stakovskii, Benno Stein, Mariona Taulé, Dmitry Ustalov, **Xintong Wang**, Matti Wiegmann, Seid Muhie Yimam and Eva Zangerle (*authors are listed in alphabetical order*), “Overview of PAN 2024: Multi-Author Writing Style Analysis, Multilingual Text Detoxification, Oppositional Thinking Analysis, and Generative AI Authorship Verification”, *Proceedings of the 15th International Conference of the Cross-Language Evaluation Forum for European Languages (CLEF 2024)*. September 2024 [[LLM Benchmark&Multilingual&Safety](#)]
13. Daryna Dementieva, Daniil Moskovskiy, Nikolai Babakov, Abinew Ali Ayele, Naqee Rizwa, Florian Schneider, **Xintong Wang**, Seid Muhie Yimam, Dmitry Ustalov, Elisei Stakovskii, Alisa Smirnova, Ashraf Elnagar, Animesh Mukherjee and Alexander Panchenko, “Overview of the Multilingual Text Detoxification Task at Pan 2024”, *Proceedings of the 2024 Working Notes of the Conference and Labs of the Evaluation Forum (CLEF 2024)*. September 2024 [[LLM Benchmark&Multilingual&Safety](#)]
14. **Xintong Wang**, Xiaoyu Li, Xingshan Li, and Chris Biemann, “Probing Large Language Models from A Human Behavioral Perspective”, *Proceedings of the Bridging Neurons and Symbols for Natural Language Processing and Knowledge Graphs Reasoning at 2024 Joint International Conference on Computational Linguistics, Language Resources and Evaluation (NeusymBridge at LREC-COLING)*. May 2024 [[LLM Interpretability](#)]
15. **Xintong Wang**, Xiaoyu Li, Liang Ding, Sanyuan Zhao, and Chris Biemann, “Using Self-Supervised Dual Constraint Contrastive Learning for Cross-modal Retrieval”, *Proceedings of the 26th European Conference on Artificial Intelligence (ECAI)*. September 2023 (**Core Rank A and CCF-B**) [[LVLM Efficiency](#)]
16. 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 (SRW at AACL-IJCNLP)*. November 2022 [[LVLM Efficiency](#)]
17. **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 (**Core Rank B**) [[LVLM Benchmark&Interpretability](#)]
18. 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 (SRW at NAACL)*. June 2021 [[LVLM Interpretability](#)]
19. 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 (**Core Rank A and JCR-Q1**) [[NLP Summarization](#)]
20. 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 (**Core Rank B**) [[CV GAN](#)]
21. 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 [[CV Spatial-temporal](#)]
22. Haitao Yang, Jianming Lv, Fei Xu, **Xintong Wang**, Yilin Huang, Lanting Xia, and Xuewu Zhu, “Regression Approach for Optimal Purchase of Hosts Cluster in Fixed Fund for Hadoop Big Data Platform”, *Proceedings of the 19th International Conference on Smart City, Transportation and Buildings*, June 2017 [[Distributed System](#)]
23. 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 [[Distributed Computing](#)]
24. Haibiao Lin, Jianming Lv, Can Yang, Miaoyi Deng, Kaitao Wang, and **Xintong Wang**, “GPS Trajectory Mining: A Survey”, *Journal of Computational Information Systems*, 16 (2014): 6947-6956 [[Spatial-temporal](#)]

INVITED TALKS

- Multimodal Representation Learning: Understanding and Leveraging 03.2025
Hosts: Prof. Dr. Jianming Lv, South China University of Technology
- Mitigating Hallucinations in Large Vision-Language Models (LVLMs) 07.2024
Online Talk
- Probing Large Language Models from A Human Behavioral Perspective 05.2024
Hosts: Dr. Tiansi Dong, NeusymBridge@LREC-Coling 2024
- Probing Large Language Models (LLMs) for Predicting Human Behavioral Data 05.2023
Hosts: Prof. Dr. Markus Hofmann and Prof. Dr. Ralph Radach, Universität Wuppertal

TEACHING

- **Lecturer** at University of Hamburg Winter 2025
Master Course: Exercises Natural Language Processing and the Web
- **Lecturer** at University of Hamburg Summer 2025
Master Course: Exercises Statistical Methods of Language Technology
- **Teaching Assistant** at Max Planck Institute Winter 2024
Bachelor, Masters and PhD Course: Introduction to Python for Research
- **Co-Instructor** at University of Hamburg Winter 2024
Bachelor Course: Deep Learning for Natural Language Processing
- **Project Mentor** at University of Hamburg Summer 2022&2023
Master Project: Web Interfaces for Language Processing Systems
- **Co-Lecturer** at University of Hamburg Winter 2020
Master Course: Natural Language Processing and the Web

SUPERVISION

Co-Supervised Doctoral Students

- **Jingheng Pan** PhD Candidate, at Universität Hamburg, Hamburg, Germany 01.10.2025 - Current
Area: LVLM Post-Training, Reasoning
- **Yixiao Liu** PhD Candidate, at Universität Hamburg, Hamburg, Germany 01.01.2026 - Current
Area: LLM Post-Training, Interpretability, Cognitive Analysis

Master Theses

- **Longqin Jiang** MSc, at Universität Hamburg 01.12.2025
Thesis: Improving In-Image Text Understanding in Large Vision-Language Models
- **Jingheng Pan** MSc, at Universität Hamburg 30.08.2025
Thesis: Ambiguity Resolution in Multimodal Machine Translation
- **Xiaoyu Li** MSc, at Technische Universität Berlin & Beijing Institute of Technology 06.03.2024
Thesis: Methods towards Understanding and Application of Foundation Models
- **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
- **Florian Schneider** MSc, at Universität Hamburg 27.07.2021
Thesis: Self-Supervised Multi-Modal Text-Image Retrieval Methods to Improve Human Reading
GSCL Best Master's Thesis Award 2023

Research Assistants & Interns

- **Jingfan Xin** MSc, at Universität Hamburg, Hamburg, Germany 15.06.2025 - Current
Topic: Large Reasoning Models
- **Longqin Jiang** MSc, at Universität Hamburg, Hamburg, Germany 01.05.2024 - Current
Topic: Enhancing Multilingual Capabilities in Large Vision Language Models
- **Yixiao Liu** MSc, at Nanyang Technological University, Singapore City, Singapore 01.10.2023 - 31.12.2025
Topic: Mitigating Biases in Chinese Toxic Language
- **Jingheng Pan** MSc, at Universität Hamburg, Hamburg, Germany 15.09.2023 - 30.09.2025
Topic: Mitigating Hallucinations in Large Vision-Language Models
- **Xiaoyu Li** MSc, at Technische Universität Berlin, Berlin, Germany 01.10.2022 - 30.09.2023
Topic: Dual Constraint Contrastive in Cross-modal Retrieval
- **Prateek Chaudhury** BSc, at Indian Institute of Technology Delhi, New Delhi, India 01.06.2021 - 31.08.2021
Topic: Reading Material Analysis for Second Language Learners

PROJECTS

- (Pending) RTG: *Human-AI Synergy: Methods, Models, and Mechanisms for Synergetic Collaboration between Human and Artificial Intelligence*
Submitted to German Research Foundation (DFG), 09.2026 – 10.2030, Co-PI (Upon Approval)
- (Pending) SPP: *Episodic Memories in Large Language Models? Neurocognitive Simulation of Hippocampal Subfields*
Submitted to German Research Foundation (DFG), 09.2026 – 10.2029, PI (Upon Approval)
- SFB TRR 169 Project C7: *Crossmodal Learning for Improving Human Reading*
Funded by German Research Foundation (DFG): 05.2020 - 12.2024, Doctoral Researcher (Core Participant)

SCHOLARSHIPS AND AWARDS

- 26th European Conference on Artificial Intelligence (ECAI 2023), Travel Grant 2023
- The 58th Annual Meeting of the Association for Computational Linguistics (ACL 2020), D&I Grant 2020
- South China University of Technology, Graduate Research Scholarships 2016–2019
- South China University of Technology, Bachelor Scholarships 2013–2016
- Tencent Research Scholarship 2016
- Outstanding Winner of Pearl River Delta+ National College Students Innovation Contest, Team Leader 2015
- Honorable Mention of International Mathematical Contest In Modeling Certificate of Achievement 2015

PROFESSIONAL ACTIVITIES

- Funding Reviewer: Vienna Science and Technology Fund
Vienna Research Groups for Young Investigators 2025
- Organizer and Task Committee: POLAR@SemEval 2026
Attitude Polarization Detection in Multilingual Text 2025
- Organizer and Task Committee: CLEF-2025 SemEval Task
Multilingual Text Detoxification 2025
- Organizer and Task Committee: CLEF-2024 SemEval Task
Multilingual Text Detoxification 2024
- Area Chair: NAACL
Multimodal Learning 2025
- Session Chair: ECAI 2023 Technical Sessions
Speech and Natural Language Processing 2023
- Conference Reviewer: ACL, EMNLP, NAACL, CVPR
Multimodal Learning, Multilinguality and Language Diversity, LLM Agents 2025
- Conference Reviewer: ACL, EMNLP, NAACL, COLING, AISTATS, ACM MM
Multimodal Learning, Interpretability and Analysis of Models for NLP, Cognitive Modeling 2025
- Conference Reviewer: ACL, EMNLP, NAACL, LREC-COLING, ECCV, ACM MM, NeurIPS
Multimodal Learning, Interpretability and Analysis of Models for NLP, Integrated Systems and Applications 2024
- Conference Reviewer: ACL, EMNLP, NAACL, EACL, IJCNLP-AACL, CVPR, ACM MM, ECAI
Multimodal Learning, Sentiment Analysis, Stylistic Analysis, and Argument Mining 2023
- Conference Reviewer: ACL, EMNLP, EACL, IJCNLP-AACL
Cognitive Modeling and Psycholinguistics, Summarization, Multimodal 2022
- Conference Reviewer: ACL, NAACL, IJCAI/Senior Program Committee, KONVENS/Program Committee
Summarization, Generation, Crossmodal Learning, Multilingual Hate Speech 2021
- Conference Reviewer: ACL, EMNLP, IJCNLP-AACL
Summarization, Generation, Multidisciplinary 2020
- Conference Reviewer: EMNLP, NLPCC
Summarization, Conversational Bot/QA/IR/Dialogue 2019
- Area Chair for ACL Rolling Review (ARR)
Multimodal Learning 2024–2025
- Reviewer for ACL Rolling Review (ARR)
Multimodal Learning, Interpretability and Analysis of Large Language Models 2021–2025
- Reviewer for Journal TALLIP
Natural Language Processing 2020–2021
- Reviewer for Journal IEEE Access
Computer Vision, Natural Language Processing 2020–2021

SKILLS

- **Programming Languages:** Python, Java, C++, C
- **Toolkit for DL and LLMs:** PyTorch, Hugging Face Transformers, DeepSpeed, vLLM, NumPy, Pandas, Matplotlib, Scikit-learn, NLTK, spaCy, Weights & Biases

LANGUAGES

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