Qingni Wang

Email: qingni1031@gmail.com Homepage Google Scholar
Institution: University of Electronic Science and Technology of China (UESTC)
Status: Master Degree Candidate

EDUCATION

China University of Mining and Technology (CUMT) Sep 2019 — Jun 2023
Bachelor's degree in Electronic Information Science and Technology Average GPA: 4.00/5.00 (Rank 5/106)

University of Electronic Science and Technology of China (UESTC) Sep 2023 — Present
Master's degree in Computer Science and Technology Average GPA: 3.54/4.00
Supervised by Prof. Bo Fu

RESEARCH EXPERIENCE

Southern University of Science and Technology (SUSTECH) Jun 2024 — Oct 2024
Supervised by Prof. Feng Zheng

- **Risk-Controlled Video Question Answering**: Developed a conformal risk-controlled framework for open-ended VideoQA, enabling statistically reliable answer selection and revealing modality-specific uncertainty behaviors when MLLMs are restricted to single-modality inputs. **(ICLR 2025 Spotlight)**

- **Omni-Modal Long Video Understanding**: Introduced LongVALE, the first large-scale benchmark for the understanding of vision-audio-language events with fine-grained temporal boundaries and correlation-aware captions. Built a scalable pipeline for automatic omni-modal annotation and developed LongVALE-trained model, enabling cross-modal reasoning and fine-grained temporal perception in long videos. **(CVPR 2025)**

University of California, Santa Barbara (UCSB) May 2025 — Present
Supervised by Prof. Xin Eric Wang

- **Risk-Controlled Reasoning in Large Language Models**: Proposed SAFER, a two-stage conformal framework for risk-constrained open-ended QA. Unlike the prior **Sample then Identify** framework that relies on the assumption that correct answers can always be sampled within a finite space, SAFER introduces explicit abstention and diverse correctness criteria to achieve provable miscoverage control and efficiency across large language models. **(Under Review)**

- **Uncertainty and Risk Control in GUI Grounding**: Studying uncertainty estimation and risk-aware routing for GUI grounding, where the model decides whether to answer or delegate based on calibrated uncertainty. **(In Progress)**

RESEARCH INTREREST

- Uncertainty Quantification:(1) Conformal Prediction (2) Conformal Risk Control.
- Hallucination in Question Answering (QA) Tasks of Multimodal Large Language Models (MLLMs).
- Trustworthy AI Agents: Risk-Aware Planning and Reliable Task Execution.

My long-term goal is to advance **trustworthy foundation models** (e.g., LLMs, MLLMs, and Agents) that understand and regulate their own uncertainty, achieving trustworthy reasoning and decision-making in complex real-world scenarios.

PUBLICATIONS

Published Papers: († means equal contribution)

1. **Qingni Wang**, Tiantian Geng, Zhiyuan Wang, Teng Wang, Bo Fu, Feng Zheng. Sample then Identify: A General Framework for Risk Control and Assessment in Multimodal Large Language Models. International Conference on Learning Representations (**ICLR**), **Spotlights**, 2025.
2. **Qingni Wang**, Yue Fan, Xin Eric Wang. SAFER: Risk-Constrained Sample-then-Filter in Large Language Models. **Under Review**.
3. Zhiyuan Wang†, **Qingni Wang†**, Yue Zhang, Tianlong Chen, Xiaofeng Zhu, Xiaoshuang Shi, Kaidi Xu. SConU: Selective Conformal Uncertainty in Large Language Models. Annual Meeting of the Association for Computational Linguistics (**ACL**), Main, 2025.
4. Tiantian Geng, Jinrui Zhang, **Qingni Wang**, Teng Wang, Jinming Duan, Feng Zheng. LongVALE: Vision-Audio-Language-Event Benchmark Towards Time-Aware Omni-Modal Perception of Long Videos. IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2025.

5. Zhiyuan Wang, Jinhao Duan, **Qingni Wang**, Xiaofeng Zhu, Tianlong Chen, Xiaoshuang Shi, Kaidi Xu. COIN: Uncertainty-Guarding Selective Question Answering for Foundation Models with Provable Risk Guarantees. **Under Review**.
6. Zhiyuan Wang, Jinhao Duan, Lu Cheng, Yue Zhang, **Qingni Wang**, Xiaoshuang Shi, Kaidi Xu, Hengtao Shen, Xiaofeng Zhu. ConU: Conformal Uncertainty in Large Language Models with Correctness Coverage Guarantees. Conference on Empirical Methods in Natural Language Processing (**EMNLP**), Findings, 2024.

ACADEMIC SERVICES

Program Committee Member of Conferences:

- Annual Meeting of the Association for Computational Linguistics (ACL) 2025
- Conference on Empirical Methods in Natural Language Processing (EMNLP) 2025
- ACM International Conference on Multimedia (MM) 2025
- International Conference on Learning Representations (ICLR) 2026

HONORS AND AWARDS

- National Scholarship 2025
- Academic Seedling Award 2025
- Outstanding Student 2024, 2025
- The First Prize Scholarship 2020, 2021

LANGUAGE PROFICIENCY

- IELTS Overall Band Score: 7.5 Sep 2025