Tiezheng Yu

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EDUCATION

Hong Kong University of Science and Technology   Hong Kong, China
PhD of Electronic and Computer Engineering, GPA: 3.88/4.3   *Aug. 2019 – Nov. 2023*

Zhejiang University   Zhejiang, China
Bachelor of Electronic Engineering, GPA: 3.84/4   *Aug. 2015 – Jun. 2019*

SELECTED PUBLICATIONS

- Jierun Chen*, **Tiezheng Yu***, Haoli Bai, Lewei Yao, Jiannan Wu, Kaican Li, Fei Mi, Chaofan Tao, Lei Zhu, Manyi Zhang, Xiaohui Li, Lu Hou, Lifeng Shang, Qun Liu "**The Synergy Dilemma of Long-CoT SFT and RL: Investigating Post-Training Techniques for Reasoning VLMs**", *TMLR*
- Kaishuai Xu, **Tiezheng Yu**, Wenjun Hou, Yi Cheng, Chak Tou Leong, Liangyou Li, Xin Jiang, Lifeng Shang, Qun Liu, Wenjie Li "**Subtle Errors in Reasoning: Preference Learning via Error-injected Self-editing**", *ACL 2025*
- Kaishuai Xu, **Tiezheng Yu**, Wenjun Hou, Yi Cheng, Liangyou Li, Xin Jiang, Lifeng Shang, Qun Liu, Wenjie Li "**Learning to Align Multi-Faceted Evaluation: A Unified and Robust Framework**", *ACL 2025*
- **Tiezheng Yu**, Ziwei Ji, Pascale Fung "**Improving Query-Focused Meeting Summarization with Query-Relevant Knowledge**", *AACL 2023*
- **Tiezheng Yu**, Hanchao Yu, Davis Liang, Yuning Mao, Shaoliang Nie, Po-Yao Huang, Madian Khabsa, Pascale Fung, Yi-Chia Wang"**Generating Hashtags for Short-form Videos with Guided Signals**", *ACL 2023*
- **Tiezheng Yu***, Rita Frieske*, Peng Xu*, Samuel Cahyawijaya*, Cheuk Tung Shadow Yiu, Holy Lovenia, Wenliang Dai, Elham J Barezi, Qifeng Chen, Xiaojuan Ma, Bertram E Shi, Pascale Fung, "**Automatic Speech Recognition Datasets in Cantonese: A Survey and New Dataset**", *LREC 2022*
- **Tiezheng Yu***, Wenliang Dai*, Zihan Liu, Pascale Fung, "**Vision Guided Generative Pre-trained Language Models for Multimodal Abstractive Summarization**", *EMNLP 2021*
- Dan Su*, **Tiezheng Yu***, Pascale Fung, "**Improve Query Focused Abstractive Summarization by Incorporating Answer Relevance**", *ACL 2021*
- **Tiezheng Yu***, Zihan Liu*, Pascale Fung, "**AdaptSum: Towards Low-Resource Domain Adaptation for Abstractive Summarization**", *NAACL 2021*

SELECTED PROJECTS (PHD)

CAiRE-COVID [Github] [Demo]   Mar. 2020 – Apr. 2020
- Introduction: We develop a question answering and **multi-document summarization** system for **mining the available scientific literature** about COVID-19.
- Award: We won one of ten tasks in COVID-19 Open Research Dataset Challenge (CORD-19).
- My work: Make the **answer reranking**, **highlight generation** and **summarization** part for the system.

Genome-wide Risk Analysis for Alzheimer's Disease [Paper]   July. 2020 – July. 2022
- Introduction: Our goal is employing a new approach (Deep Learning method) that can achieve more accurate prediction on Alzheimer's disease and provide richer insights using the genome sequence. We investigate the effect of the self-supervised pre-training to the performance on Alzheimer's disease risk prediction.
- Outcome: We publish a papers about this project in BioNLP 2022.
- My work: Implement the **RNN** and **polygenic risk score (PRS)** baselines. Implement the code framework for the pre-training.

Cantonese ASR datasets: a survey and new dataset [Paper]   July. 2021 – April. 2022
- Introduction: We address the problem of data scarcity for the Hong Kong Cantonese language by doing a literature review of all the existing datasets, creating a new Cantonese dataset and train state-of-the-art models using joint datasets.
- Outcome: We publish a paper about this project in LREC 2022, releas the dataset and the model checkpoints.
- My work: Finish the **literature review**, write the major part of the paper, and help with training models.

Survey of Hallucination in Natural Language Generation [Paper]   Oct. 2021 – Feb. 2022

- Introduction: In this survey, we provide a broad overview of the research progress and challenges in the hallucination problem of NLG. The survey is organized into two big divisions: (i) a general overview of metrics, mitigation methods, and future directions; (ii) task-specific research progress for hallucinations in a large set of downstream tasks
- Outcome: Our survey paper is accepted by the "ACM Computing Surveys" journal.
- My work: Write the section of **"Hallucination in Abstractive Summarization"** in the paper. Participate in discussions and revisions throughout the survey.

A Multitask, Multilingual, Multimodal Evaluation of ChatGPT [Paper] Dec. 2022 – Feb. 2023
- Introduction: ChatGPT has shown its powerful text generation ability since it came out. We aim at quantitatively evaluate interactive LLMs such as ChatGPT using publicly available data sets.
- Outcome: We pre-print our paper "A Multitask, Multilingual, Multimodal Evaluation of ChatGPT on Reasoning, Hallucination, and Interactivity".
- My work: I run the experiments and write the paper for the summarization part of the evaluation.

WORKING EXPERIENCE

Research Intern (AI) - Meta Aug. 2022 – Nov. 2022
- Introduction: We propose a new task formulation for Short-form Video Hashtag Recommendation that generate hashtags for short-form videos, while existing works have been restricted to select hashtags from limited candidates. Results show that generative models surpass the classification models and our model can create meaningful novel hashtags that are comparable to the ground truth hashtags.
- Outcome: Our paper is accepted in ACL 2023 main conference. I also give an internal presentation and write an internal blog.

Researcher - Huawei Dec. 2023 – present
- **LLM Evaluation**: TBD
- **Data Flywheel**: TBD
- **Hallucination Mitigation**: TBD

AWARDS & RECOGNITION

Academic Award
- China National Scholarship [top 2%]
- Zhejiang Province College Students Physics Competition

Competition
- Winner of COVID-19 Open Research Dataset Challenge   *May 2020*
- First place in CL-LaySumm 2020 shared task   *July 2020*

Reviewing activities
- ACL Rolling Review, AAAI, ICLR, etc.