Yang Wang

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A Personal Website

Education

University of Sheffield (Distinction)

MSc Computer Science with Speech and Language Processing

National Chung Hsing University

 $BSc\ Applied\ Mathematics$

Sheffield, UK Oct 2020 - Sept 2021 Taichung, TW

Sept 2014 - June 2018

Working Experience

The University of Sheffield

ML and NLP Engineer, KTP Associate

Sheffield, UK

April 2023 - Present

- Proposed a novel textual adversarial defence method to mitigate text-based adversarial attacks, achieving a 30% improvement in system robustness by reducing performance drop rates.
- Developed Confit, an advanced audio fine-tuning framework that integrates contrastive-based fine-tuning, parameter-efficient fine-tuning, and supervised fine-tuning techniques to enhance model performance.

Automated Analytics

Doncaster, UK

Research Intern

November 2021 - September 2022

- Undertook the development of an advanced call categorisation system, achieving a 20% increase in classification accuracy and significantly outperforming the current in-house model.
- Developed a custom in-house Whisper-based transcription model using distillation techniques, achieving 3x faster inference while maintaining on-par performance with the original model.

VoiceBase Centre Sheffield, UK

Research Intern

May 2021 - May 2022

o Designed a speaker embeddings de-mixing framework using VoiceBase mini-framework.

Publications

- 1. Y. Wang, C. Lin, Tougher Text, Smarter Models: Raising the Bar for Adversarial Defence Benchmarks, Proceedings of the 31st International Conference on Computational Linguistics (COLING 2025), Oral Presentation. Link: https://aclanthology.org/2025.coling-main.432/.
- 2. G. Tomas, Y. Wang, C. Lin, C. Chung-Chi, From Facts to Insights: A Study on the Generation and Evaluation of Analytical Reports for Deciphering Earnings Calls, Proceedings of the 31st International Conference on Computational Linguistics (COLING 2025), Oral Presentation. Link: https://aclanthology.org/2025.coling-main.705/.
- 3. Y. Wang, C. Xiao, Y. Li, S. Middleton, N. Moubayed, C. Lin, Adversarial Defence without Adversarial Defence: An Instance-level Principal Component Removal Approach, Transactions of the Association for Computational Linguistics (TACL), Under Review.
- Y. Wang, Q. Liang, C. Xiao, Y. Li, N. Moubayed, C. Lin, Audio Contrastive based Fine-tuning, Transactions on Audio, Speech, and Language Processing (TASLP), Under Review. Link: https://arxiv.org/abs/2309.11895.

Additional Experience

- 1. Team member of England National Volleyball Team in NVL Super League 2021/2022.
- 2. Team member of Yorkshire Men's Super League (currently 1st ranking) 2023/2024.
- 3. Leeds Malaysian Games 1st place in 2025 administered by Malaysian Society.