

Yi (Justice) Zhang

AI / Machine Learning Engineer — LLM, NLP & Speech

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[LinkedIn](#) | [GitHub](#) | [Website](#) | [Google Scholar](#)

EXPERIENCE

BIGO | Jul 2024 – Aug 2026

Machine Learning / LLM Engineer

- Shipped and operated multilingual LLM and BERT moderation systems for IMO and Bigo Live across six languages, spanning data and evaluation, SFT, vLLM/Kubernetes serving, staged rollout, and human-review and automatic-action workflows.
- Built a product-aware LLM baseline from 12.5M+ human-review examples across two products; retained hard negatives and label provenance, fixed evaluation sets, and calibrated per-language thresholds.
- Raised confirmed violations by 55% at constant review volume for the first three migrated languages while consolidating a six-language production fleet and cutting GPU footprint by 72%.
- Delivered a usable internal RAG and semantic-search tool over recent multilingual transcripts and room content, enabling investigators to retrieve similar cases, filter by metadata, and reconstruct surrounding context with second-level queries.

BIGO | Dec 2023 – Jun 2024

Machine Learning Engineer Intern (Speech)

- Reproduced and fine-tuned a neural TTS model on internal Arabic data, coordinated human listening evaluation, and delivered a Dockerized service for BIGO Live host reception that passed product testing and reached users.
- Built a callable multilingual TTS service for Likee news videos using Azure TTS and an English StyleTTS2 path, returning timestamped subtitles for synchronized narration; the service passed integration testing and reached users.

Microsoft Research Asia | Dec 2021 – Oct 2022

Research Intern, Intelligent Multimedia Group

- Designed and implemented Ada-TISE, a dual-branch Transformer that combines alignment-aware and cross-attention text fusion for speech enhancement under unreliable noisy-speech alignment.
- Led model implementation, training, ablation studies, analysis, and technical-report writing; improved PESQ, CSIG, CBAK, and COVL by 0.12, 0.11, 0.05, and 0.11 over a FLOPs-balanced baseline on Voice Bank+DEMAND under the low-SNR condition.

EDUCATION

The University of British Columbia | Sep 2026 – Jun 2027 (expected)

Master of Data Science in Computational Linguistics

Beihang University | Sep 2021 – Jun 2024

Master of Engineering in Computer Technology

Chongqing University | Sep 2017 – Jun 2021

Bachelor of Engineering in Software Engineering

SELECTED PUBLICATIONS

- Wei Zhang*, **Yi Zhang***, et al. “[ADC: Enhancing Function Calling via Adversarial Datasets and Code Line-Level Feedback](#).” *ICASSP*, 2025. *Equal contribution.
- Wei Zhang, Hongcheng Guo, Jian Yang, Zhoujin Tian, **Yi Zhang**, et al. “[mABC: Multi-Agent Blockchain-inspired Collaboration for Root Cause Analysis in Micro-Services Architecture](#).” *Findings of EMNLP*, 2024.
- **Yi Zhang**, Zhiyuan Zhao, Dacheng Yin, Yucheng Zhao, Chuanxin Tang, and Chong Luo. “Ada-TISE: Adaptive Text Informed Speech Enhancement.” Technical Report, 2022.

AWARDS

Silver Medal, International Collegiate Programming Contest Asia-East Continent Final, 2019

TECHNICAL SKILLS

LLM, NLP & Speech: LLM fine-tuning (SFT, LoRA/PEFT), RAG, transformer models, multilingual classification, TTS, speech enhancement, model evaluation

ML Engineering: Python, PyTorch, Hugging Face Transformers, vLLM, FastAPI, Docker, Kubernetes, REST APIs, Linux

Data & Production: SQL, Hive, Presto, HDFS, Parquet, DuckDB, Polars

Methods: Experiment design, threshold calibration, human-in-the-loop systems