# Dong Zhang

#### **Research Interests**

#### **Multi-modal Foundation Models**

Unified multi-modal LLM with perceptive and generative abilities

#### Multi-modal LLM Agent

Agents built on multi-modal LLM

#### **Generative AI for speech**

Spoken language models, Speech tokenizer

#### Education

**Fudan University** 

M.S. IN COMPUTER SCIENCE

• Advisor: Prof. Yaqian Zhou & Prof. Xipeng Qiu, FudanNLP group

**Fudan University** 

B.S. IN ELECTRONIC ENGINEERING

Shanghai, China 2022.9-2025.6 (expected)

022.9-2025.6 (expecteu<sub>)</sub>

Shanghai, China 2018.9-2022.6

### **Publications** & **Preprints**.

#### SpeechGPT: Empowering Large Language Models with Intrinsic Cross-Modal Conversational Abilities

- Dong Zhang, Shimin Li, Xin Zhang, Jun Zhan, Pengyu Wang, Yaqian Zhou, Xipeng Qiu
- This work is a Trending Project at Github with **880+ stars** and is promoted by different media and forums, such as *Heart of Machine, Speech Home, Twitter and Youtube*
- EMNLP 2023 Findings

#### SpeechTokenizer: Unified Speech Tokenizer for Speech Large Language Models

- Dong Zhang\*, Xin Zhang\* (Equal contribution, order is random), Shimin Li, Yaqian Zhou, Xipeng Qiu
- Github 270+ stars
- ICLR 2024

#### SpeechGPT-Gen: Scaling Chain-of-Information Speech Generation

- Dong Zhang\*, Xin Zhang\* (Equal contribution), Jun Zhan, Shimin Li, Yaqian Zhou, Xipeng Qiu
- Preprint

#### SpeechAgents: Human-Communication Simulation with Multi-Modal Multi-Agent Systems

- Dong Zhang, Zhaowei Li, Pengyu Wang, Xin Zhang, Yaqian Zhou, Xipeng Qiu
- Preprint

#### **SpeechAlign: Aligning Speech Generation to Human Preferences**

- Dong Zhang\*, Zhaowei Li\*, Shimin Li, Xin Zhang, Pengyu Wang, Yaqian Zhou, Xipeng Qiu
- Preprint

#### **DUB: Discrete Unit Back-translation for Speech Translation**

- Dong Zhang, Rong Ye, Tom Ko, Mingxuan Wang, Yaqian Zhou
- ACL 2023 Findings

#### **AnyGPT: Unified Multimodal LLM with Discrete Sequence Modeling**

- Jun Zhan<sup>\*</sup>, Junqi Dai<sup>\*</sup>, Jiasheng Ye<sup>\*</sup>, Yunhua Zhou, **Dong Zhang**, Zhigeng Liu, Xin Zhang, Ruibin Yuan, Ge Zhang, Linyang Li, Hang Yan, Jie Fu, Tao Gui, Tianxiang Sun, Yugang Jiang, Xipeng Qiu
- This work gets 400+ stars at Github and is promoted by different media and forums, such as Heart of Machine, Twitter
- Preprint

#### **Grounding GPT: Language Enhanced Multi-modal Grounding Model**

- Zhaowei Li, Qi Xu, Dong Zhang, Hang Song, Yiqing Cai, Qi Qi, Ran Zhou, Junting Pan, Zefeng Li, Van Tu Vu, Zhida Huang, Tao Wang
- Preprint

#### InferAligner: Inference-Time Alignment for Harmlessness through Cross-Model Guidance

- Pengyu Wang, Dong Zhang, Yanglin Li, Xinghao Wang, Chenkun Tan, Ke Ren, Botian Jiang, Xipeng Qiu
- Preprint

#### **SeqXGPT: Sentence-Level Al-Generated Text Detection**

- Pengyu Wang, Linyang Li, Ke Ren, Botian Jiang, **Dong Zhang**, Xipeng Qiu
- EMNLP 2023

## **GenTranslate: Large Language Models are Generative Multilingual Speech and Machine Translators**

- Yuchen Hu, Chen Chen, Chao-Han Huck Yang, Ruizhe Li, **Dong Zhang**, Zhehuai Chen, Eng Siong Chng
- Preprint

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#### **ByteDance Al-Lab (Shanghai)**

RESEARCH INTERN

- Mentor: Rong Ye
- Topic: Speech translation, speech pre-training

Shanghai, China April 2022 - June 2023

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SCHOLARSHIP FOR OUTSTANDING STUDENT OF FUDAN UNIVERSITY

2023, 2022, 2021, 2020, 2019

#### Academic Services \_\_\_\_\_

REVIEWER: EMNLP (2023), ACL (2024)