Delong Chen (陈德龙)

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Education

Hong Kong University of Science and Technology (HKUST)	Sept. 2023 - Present
Ph.D. Student in ECE Department, advised by Prof. Pascale Fung	Hong Kong SAR
Hohai University	Sept. 2017 - Jun. 2021
B.Eng. in Computer Science, advised by Prof. Fan Liu	Nanjing, China
University of British Columbia	Jul. 2018 - Aug. 2018
Summer Program: linguistics and computation for natural language processing	Vancouver, Canada

Work Experience

Research Intern	Xiaobing.ai (Microsoft Xiaoice)	Mar. 2023 - Sept. 2023
Visual instruction tu	ning for multimodal LLMs	Beijing, China
Research Intern	Microsoft Research Asia (MSRA)	Oct. 2022 - Jan. 2023
Vision-language lear	ning for embodied AI	Beijing, China
Research Intern	MEGVII Research (Face++)	Oct. 2021 - Oct. 2022
Large-scale contrast	ive vision language pretraining	Beijing, China
Research Assistant	Hohai University	Sept. 2021 –Sept. 2023
Vision-language lear	rning for remote sensing, few-shot learning	Nanjing, China

Awards and Prizes

- **Best Paper** at AAAI 2023 Inaugural Summer Symposium Series AI x Metaverse
- Best Demo Award in IEEE International Conference on Multimedia and Expo (ICME) 2021
- Best Dataset Paper Award in Long-Tailed Distribution Learning Workshop, IJCAI 2021
- Best Presentation Award in International Conference on Big Data and Artificial Intelligence (BDAI) 2021
- First-Class Outstanding Thesis in Jiangsu Province
- Outstanding Thesis of Hohai University
- **Outstanding Graduate** of Hohai University
- **Person of the Year** of the in Jiangsu Province (nomination award)
- **Person of the Year** of Hohai University in 2019
- Third Prize of 2018 the 8th China Software Cup, East China Division Finals (team Leader)

Publications

* joint first author ■ corresponding author

- [1] **Delong Chen**, Jianfeng Liu, Wenliang Dai, Baoyuan Wang
 - **Visual Instruction Tuning with Polite Flamingo**

Thirty-Eighth AAAI Conference on Artificial Intelligence (AAAI), 2024. [github] [arxiv] (Oral)

- [2] **Delong Chen**, Zhao Wu, Fan Liu, Zaiquan Yang, Huaxi Huang, Ying Tan, Erjin Zhou. **ProtoCLIP: Prototypical Contrastive Language Image Pretraining** *IEEE Transactions on Neural Networks and Learning Systems (T-NNLS), 2023.* [github] [arxiv] [doi]
- [3] **Delong Chen**, Fan Liu, Zewen Li, Feng Xu

VirtualConductor: Music-driven Conducting Video Generation System

IEEE International Conference on Multimedia & Expo (ICME) 2021. [video] (Best Demo)

[4] **Delong Chen**, Fan Liu, Xiaoyu Du, Ruizhuo Gao, Feng Xu.

MEP-3M: A Large-scale Multi-modal E-Commerce Products Dataset

IJCAI-21 Workshop on Long-Tailed Distribution Learning, 2021. [paper] (Best Dataset Paper)

[5] <u>Delong Chen</u>, Fan Liu, Zheqi Zhang, Xiaomin Lu, Zewen Li <u>Significant Wave Height Prediction based on Wavelet Graph Neural Network</u> The 4th International Conference on Big Data and Artificial Intelligence, 2021. [arxiv] [doi] (Best Presentation)

[6] <u>Delong Chen</u>, Samuel Cahyawijaya, Jianfeng Liu, Baoyuan Wang, Pascale Fung Subobject-level Image Tokenization ArXiv Preprint, 2024. [arxiv]

[7] <u>Delong Chen</u>, Ruizhi Zhou, Yanling Pan, Fan Liu. A Simple Baseline for Adversarial Domain Adaptation-based Unsupervised Flood Forecasting ArXiv Preprint, 2022. [github] [arxiv]

[8] Fan Liu, <u>Delong Chen</u> ⋈, Ruizhi Zhou, Sai Yang, Feng Xu

Self-Supervised Music Motion Synchronization Learning for Music-Driven Conducting Motion Generation

Journal of Computer Science and Technology (JCST), 2022 [github] [video] [doi]

[9] Fan Liu*, <u>Delong Chen</u>*, Zhangqingyun Guan, Xiaocong Zhou, Jiale Zhu, Jun Zhou RemoteCLIP: A Vision Language Foundation Model for Remote Sensing *ArXiv Preprint, 2023.* [github] [arxiv]

[10] Fan Liu*, <u>Delong Chen</u>*, Xiaoyu Du, Ruizhuo Gao, Feng Xu <u>MEP-3M: A Large-scale Multi-modal E-commerce Product Dataset</u> <u>Pattern Recognition</u>, 2023. [github] [doi]

[11] Fan Liu*, <u>Delong Chen</u>*, Fei Wang, Zewen Li, Feng Xu

Deep Learning based Single Sample Face Recognition: A Survey

Artificial Intelligence Review, 2022. [arxiv] [doi]

[12] Xinyu Zhou*, <u>Delong Chen</u>*, Yudong Chen

Towards Joint Modeling of Dialogue Response and Speech Synthesis based on Large Language Model

The 6th International Conference on Natural Language and Speech Processing (ICNLSP), 2023. [github] [arxiv]

[13] Fan Liu, Tianshu Zhang, Wenwen Dai, Wenwen Cai, Xiaocong Zhou, <u>Delong Chen</u>

Few-shot Adaptation of Multi-modal Foundation Models: A Survey

ArXiv Preprint, 2024 [arxiv]

[14] Fan Liu, **Delong Chen**, Jun Zhou, Feng Xu

A Review of Driver Fatigue Detection and Its Advances on the Use of RGB-D Camera and Deep Learning Engineering Applications of Artificial Intelligence, 2022. [doi]

[15] Fan Liu, Sai Yang, <u>Delong Chen</u>, Huaxi Huang, Jun Zhou Few-shot Classification Guided by Generalization Error Bound Pattern Recognition, 2023. [doi]

[16] Sai Yang, Fan Liu, **Delong Chen**, Jun Zhou

Few-shot Classification via Ensemble Learning with Multi-Order Statistics
Thirty-Second International Joint Conference on Artificial Intelligence (IJCAI), 2023. [arxiv] (Oral)

[17] Zhuoran Zhao, Jinbin Bai, <u>Delong Chen</u>, Debang Wang, Yubo Pan

Taming Diffusion Models for Music-driven Conducting Motion Generation

AAAI 2023 Inaugural Summer Symposium Series – AI x metaverse. [github] [arxiv] [doi] (Best Paper)

[18] Ziwei Ji, Nayeon Lee, Rita Frieske, Tiezheng Yu, Dan Su, Yan Xu, Etsuko Ishii, Ye Jin Bang, **Delong Chen**. Ho Shu Chan, Wenliang Dai, Andrea Madotto, Pascale Fung

Survey of Hallucination in Natural Language Generation

ArXiv Preprint, 2024 [arxiv]

Professional Services

Reviewer: ACM Multimedia 2023, Artificial Intelligence Review, IEEE Transactions on Intelligent Transportation Systems, Journal of Digital Imaging

Teaching Assistant: ELEC-1200 A System View of Communications (2024 Spring, HKUST)