

Tingle Li

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EDUCATION	University of California, Berkeley <i>Ph.D. in Computer Science</i> • Affiliated to Berkeley Artificial Intelligence Research (BAIR) Lab	Berkeley, CA <i>Aug. 2022 - Present</i>
	Tiangong University <i>B.Eng. in Computer Science and Technology</i> • Pilot class of Artificial Intelligence (an elite program for top 10% students)	Tianjin, China <i>Sep. 2016 - Jun. 2020</i>

RESEARCH INTERESTS	Audio Processing: Source Separation, Voice Conversion, Music Information Retrieval Multi-modal Perception: Audio-visual Learning, Self-supervised Learning, Computer Vision
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PUBLICATIONS & PREPRINTS	Tingle Li , Yichen Liu, Andrew Owens, Hang Zhao. “Learning Visual Styles from Audio-Visual Associations”. <i>In Proc. ECCV</i> , 2022.
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Running Zhao, Jiangtao Yu, **Tingle Li**, Edith C.H. Ngai, Hang Zhao. “Radio2Speech: High Quality Speech Recovery from Radio Frequency Signals”. *In Proc. Interspeech*, 2022.

Chenxu Hu, Qiao Tian, **Tingle Li**, Yuxuan Wang, Hang Zhao. “Neural Dubber: Dubbing for Videos According to Scripts”. *In Proc. NeurIPS*, 2021.

Tingle Li, Yichen Liu, Chenxu Hu, Hang Zhao. “CVC: Contrastive Learning for Non-parallel Voice Conversion”. *In Proc. Interspeech*, 2021.

Tingle Li, Jiawei Chen, Haowen Hou, Ming Li. “Sams-Net: A Sliced Attention-based Neural Network for Music Source Separation”. *In Proc. ISCSLP*, 2021. (**Oral Presentation**)

Qingjian Lin, **Tingle Li**, Lin Yang, Junjie Wang, Ming Li. “Optimal Mapping Loss: A Faster Loss for End-to-End Speaker Diarization”. *In Proc. Odyssey*, 2020.

Tingle Li, Qingjian Lin, Yuanyuan Bao, Ming Li. “Atss-Net: Target Speaker Separation via Attention-based Neural Network”. *In Proc. Interspeech*, 2020.

Qingjian Lin, **Tingle Li**, Ming Li. “The DKU Speech Activity Detection and Speaker Identification Systems for Fearless Steps Challenge Phase-02”. *In Proc. Interspeech*, 2020.

RESEARCH EXPERIENCE	Electrical Engineering and Computer Science Advisor : Prof. <i>Andrew Owens</i> <i>Learning Visual Styles from Audio-Visual Associations</i> - Proposed a novel task termed <i>audio-driven image stylization</i> , which aims to convert the texture of a visual scene conditioned on sound (project page).	University of Michigan <i>Apr. 2021 - Jul. 2022</i>
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	Institute for Interdisciplinary Information Sciences (IIIS) Advisor : Prof. <i>Hang Zhao</i> <i>CVC: Contrastive Learning for Non-parallel Voice Conversion</i> - Explored a voice conversion model based on noise contrastive estimation loss, which enables one-way conversion in the non-parallel voice conversion setting (project page).	Tsinghua University <i>Jul. 2020 - Jul. 2022</i>
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Neural Dubber: Dubbing for Videos According to Scripts

- Introduced a novel task called *automatic video dubbing*, which aims to synthesize speech temporally synchronized with the video given scripts (project page).

Modality Laziness: Everybody's Business is Nobody's Business

- Discussed an optimization problem in multi-modal fusion methods, where encoders from multi-modal training suffer from learning insufficient representations of each modality (paper).

Data Science Research Center

Advisor : Prof. *Ming Li*

Duke Kunshan University

Jul. 2019 – Jul. 2020

Atss-Net: Target Speaker Separation via Attention-based Neural Network

- Proposed a method that leverages the attention mechanism to incorporate the mixture spectrogram and target speaker embedding (project page).

Sams-Net: A Sliced Attention-based Neural Network for Music Source Separation

- Proposed a method in which the scope of attention is narrowed down to the intra-chunk features that are most likely to affect each other (project page).

Optimal Mapping Loss: A Faster Loss for End-to-End Speaker Diarization

- Developed a novel optimal mapping loss between the output and ground-truth speaker sequences through the Hungarian algorithm (paper).

AWARDS &
ACHIEVEMENTS

Berkeley Graduate Student Fellowship	<i>Aug. 2022</i>
BAIR Research Ignition Award	<i>Aug. 2022</i>
ISCA Travel Grant Award, Interspeech 2021	<i>Jun. 2021</i>
Best Undergraduate Dissertation (top 1%)	<i>Jun. 2020</i>
1st for SID & 3rd for SAD, Fearless Steps Challenge Phase-2, Interspeech 2020	<i>May. 2020</i>
Presidential Scholarship for Outstanding Students (top 5%)	<i>Dec. 2017, 2018, 2019</i>
1st Prize, China Students Innovation and Entrepreneurship Competition (top 8%)	<i>May. 2019</i>
3rd Prize, Lan-Qiao Cup National Selection Competition	<i>May. 2017</i>
