HAICI YANG

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700 N. Woodlawn Ave. Luddy Hall,
Bloomington, Indiana, 47408.

EDUCATION

PhD Indiana University Bloomington, IN. Aug. 2019 – Current
Intelligent System Engineering
Advised by Professor Minje Kim in Signal and AI Group in Engineering

MS Peking University Beijing, China Sep. 2017 – Jun. 2019
Informatics
Advised by Professor Jun Wang in KVision Digital Library Lab.

BS Beijing Normal University Beijing, China Sep. 2013 – Jun. 2017
Information System; Minored in Psychology
GPA 4.2/5; Graduated with Honor

PUBLICATIONS

Conference Papers

[C-6] **Haici Yang**, Wootaek Lim, and Minje Kim. "Neural Feature Predictor and Discriminative Residual Coding for Low-Bitrate Speech Coding." arXiv preprint arXiv:2211.02506 (2022). *(Submitted to ICASSP2023)*

[C-5] **Haici Yang,** Sanna Wager, Spencer Russell, Mike Luo, Minje Kim, and Wontak Kim. "Upmixing via style transfer: a variational autoencoder for disentangling spatial images and musical content." In ICASSP 2022-2022 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), pp. 426-430. IEEE, 2022.

[C-4] **Haici Yang**, Shivani Firodiya, Nicholas J. Bryan, and Minje Kim. "Don't Separate, Learn To Remix: End-To-End Neural Remixing With Joint Optimization." In ICASSP 2022-2022 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), pp. 116-120. IEEE, 2022.

[C-3] **Haici Yang**, Kai Zhen, Seungkwon Beack, and Minje Kim. "Source-aware neural speech coding for noisy speech compression." In ICASSP 2021-2021 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), pp. 706-710. IEEE, 2021.

[C-2] Sunwoo Kim, **Haici Yang**, and Minje Kim. 2020, May. Boosted Locality Sensitive Hashing: Discriminative Binary Codes for Source Separation. In ICASSP 2020-2020 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) (pp. 106-110). IEEE. *'Nomination of Best Student Paper Award'*

[C-1] **Haici Yang**, Hongda Mao, Ruirui Li, Chelsea JT Ju, and Oguz Elibol. "Non-local convolutional neural networks (NLCNN) for speaker recognition." arXiv preprint arXiv:2011.03682 (2020).

Journal Papers

[J-1] Börner K, et al. (2020) Mapping the co-evolution of artificial intelligence, robotics, and the internet of things over 20 years (1998-2017). PLoS ONE 15(12): e0242984. https://doi.org/10.1371/journal.pone.0242984

Domestic Publications (In Chinese)

[JC-3] **Haici Yang**. "Network Extraction and Analysis on SongYuanXueAn -- Word Embedding Application on Chinese Traditional Text". Peking University. 2019

[JC-2] **Haici Yang**, Jun Wang. "Construction and Visualization of Knowledge Graph on Academic Relationships among People in Song Dynasty". Data Analysis and Knowledge Discovery, vol. 3, no. 6, 2019, pp. 109-116. (Demo: kvlab.org/cbdb_kg)

[JC-1] Jian Jin, **Haici Yang**. "A Topic Relevance Aware Model for Reviewer Recommendation", Digital Library Forum, vol. 4, 2017, pp. 47-55.

WORK EXPERIENCE

Indiana University, Bloomington, IN Jan 2021 - Current
Research Assistant

- Supervisor: Minje Kim
- Project 1: Source-aware neural codec targeting the mixture signal coding problem. Work published [C-3].
- Project 2: End-to-end music remixing model that jointly optimizes remixing and source separation tasks. Work published [C-4].
- Project 3: Low-latency generative neural codec. Work submitted [C-6].

Microsoft – Microsoft Research Asia Nov 2022 – Feb 2023
Research Intern. *Beijing, China*

- Supervisor: Xiulian Peng

Amazon.com, Inc – Lab126 Summer 2021
Applied Scientist Intern. *Cambridge, MA*

- Supervisor: Wontak Kim, Sanna Wager, Spencer Russell
- Project: Blind stereo-to-5-channel upmixing involving spatial image and musical content disentanglement. Work published [C-5].

Amazon.com, Inc - Alex Speech Team Summer 2020
Applied Scientist Intern. *Sunnyvale, CA*

- Supervisor: Oguz Elibol, Hongda Mao
- Project: An overview of the state-of-art speaker recognition model and the exploration of the application of Non-local Convolutional Neural Networks (NLCNN) in the speaker recognition problem. See [C-1]

Cyberinfrustructure Network Science Center, Bloomington, IN Aug 2018 – Mar 2019
Research Assistant

- Supervisor: Katy Borner
- Project: Mapping the co-evolution of artificial intelligence, robotics, and the internet of things over 20 years through keyword detection and network analysis and visualization. Work published [J-1]

WWF China, Beijing China Summer 2018

Analyst Intern

- Website design and development for Human Resource Team.

Nielsen, Beijing China Summer 2016

Analyst Assistant

- Data-driven user study reports producing for Telecom Team

TEACHING EXPERIENCE

Indiana University, Bloomington, IN Fall 2019

Associated Instructor

- ENGR-E533 Deep Learning System