

# HAICI YANG

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## EDUCATION

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- 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  
Graduated with Honor

## PUBLICATIONS

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### *Conference Papers*

- [C-1] Kim, S., **Yang, H.** and Kim, M., 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-2] **H. Yang**, K. Zhen, S. Beack and M. Kim, "Source-Aware Neural Speech Coding for Noisy Speech Compression," ICASSP 2021 - 2021 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2021
- [C-3] **H. Yang**, S. Firodiya, N.J. Bryan, M. Kim, Don't Separate, Learn to Remix: End-to-End Neural Remixing with Joint Optimization. arXiv preprint arXiv: 2107.13634.  
*'Submitted to ICASSP 2022'*
- [C-4] **H. Yang**, S. Wager, S. Russell, M. Luo, M. Kim, W. Kim. Upmixing via Style Transfer: A Variational Autoencoder for Disentangling Spatial Images and Musical Content.  
*'Submitted to ICASSP 2022'*
- [C-5] **Yang, H.**, Mao, H., Li, R., Ju, C.J. and Elibol, O., 2020. Non-local convolutional neural networks (nlcnn) for speaker recognition. arXiv preprint arXiv:2011.03682.
- [C-6] Wang, Jun; **Yang, Haici**; Zhang, Liyuan;. Can Digital Humanities Help in Finding Research Questions? A Comparative Analysis of the Attitudes Towards Neo-Confucianism Study of Scholars Today and 300 Years Ago.  
*'Digital Humanities 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-1] **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](http://kvlab.org/cbdb_kg))

[JC-3] Jian Jin, **Haici Yang**. “A Topic Relevance Aware Model for Reviewer Recommendation”, Digital Library Forum, vol. 4, 2017, pp. 47-55.

### **WORK EXPERIENCE**

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**Indiana University, Bloomington, IN**

Jan 2021 - Current

#### ***Research Assistant***

- Supervisor: Minje Kim
- Project1: Source-aware neural codec targeting on the mixture signal coding problem.
- Project2: End-to-end music remixing model that jointly optimizes remixing and source separation tasks.
- Project3: Low-latency generative neural codec.

**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 through the neural generative model with a mechanism of spatial image and musical content disentanglement.
- This work has been submitted to ICASSP 2022.

**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.

**Cyberinfrastructure Network Science Center, Bloomington, IN**

Aug 2018 – Mar 2019

#### ***Research Assistant***

- Supervisor: Katy Börner
- 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.

**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**

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**Indiana University, Bloomington, IN**

Fall 2019

*Associated Instructor*

- ENGR-E533 Deep Learning System