# Yun-Ning Hung (洪韻甯)

Contact: biboamybibo@gmail.com

Github in LinkedIn

Personal Web G Google Scholar



# **Education**

2019 Aug. - Present M. S in Music Technology, Georgia Institute of Technology

**B. S. in Electrical Engineering,** National Cheng Kung University

Cumulative GPA: 3.764/4.0

UW Madison Exchange Program, University of Wisconsin Madison

• Cumulative GPA: 3.67/4.0

# **Working Experience**

**Software Engineer Intern** at Amy.app, an online AI tutoring company

Implement and research on different machine learning models for automatically sovling math questions.

Develop feedback system by using typescript.

Research Assistant at Academia Sinica, national academy of Taiwan

Research on applying deep learning algorithm to music information retreival problems, with Dr. Yi-Hsuan Yang.

Published five papers which contribute to audio auto-tagging, music transcription and music generation problems.

**Industrial Partnership** with KKBOX Inc, the biggest online streaming company in Taiwan

Research on music classification problem by analyzing different neural networks and musical features.

Improve instrument detection (10% $\uparrow$ ), genre classification (3% $\uparrow$ ), and context classification (3\%\eta) result, which is used to generate more efficient playlist.

App and Web Developer at Adv.Media (銳比數位), application company

Unity developer for AR/VR applications.

Developed web platform to visualize and manage database

Front-End Developer at Jimbo's Coffeeine, student startup for education

Develop web platform to visualize analyzed data.

2016 Apr. - 2017 Jun.

2014 Aug. - 2015 Aug.

## **Publication**

# [1] Musical Composition Style Transfer via Disentangled Timbre Representations

Yun-Ning Hung, I-Tung Chiang, Yi-An Chen and Yi-Hsuan Yang International Joint Conferences on Artificial Intelligence (IJCAI), 2019 2012 Sep. - 2016 Jun.

2015 Sep. - 2015 Dec.

2017 Sep. - 2019 Jun.

2019 Jun. - 2019 Aug.

2017 Nov. - 2019 Jun.

#### [2] Learning Disentangled Representations for Timber and Pitch in Music Audio

Yun-Ning Hung, Yi-An Chen and Yi-Hsuan Yang arXiv preprint arXiv: 1811.03271, Nov. 2018.

# [3] Multitask learning for frame-level instrument recognition

Yun-Ning Hung, Yi-An Chen and Yi-Hsuan Yang *IEEE Int. Conf. Acoustics, Speech and Signal Processing (ICASSP)*, 2019.

## [4] Frame-level Instrument Recognition by Timbre and Pitch

Yun-Ning Hung and Yi-Hsuan Yang International Society for Music Information Retrieval Conference (ISMIR), 2018

## [5] Hit Song Prediction for Pop Music by Siamese CNN with Ranking Loss

Lang-Chi Yu, Yi-Hsuan Yang, Yun-Ning Hung, Yi-An Chen arXiv preprint arXiv: 1710.10814, Oct. 2017.

# **Technical Skill**

Web & Application HTML, Javascript, Typescript, CSS, PHP-SQL, and Unity

Machine Learning Python, Pytorch mostly, but sometime in Tensorflow

Others Git, Linux

**Instrument** Guitar, Piano, and Flute

Language Chinese (mother tongue), English, Spanish