

# HSIAO-TZU HUNG

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Currently a first-year graduate student in computer science. Has two-year full-time experience in deep learning and multimedia information retrieval, and published three related papers. An extremely communicative person and a team player.

## EDUCATION

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**National Taiwan University**

*Start from March 2020*

M.S @ Computer Science

**National Tsing Hua University**

*September 2010 - June 2014*

B.S @ Physics

## PROGRAMMING SKILLS

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Machine learning: Python, PyTorch, TensorFlow, Scikit-Learn

Engineering: Git, Linux, MongoDB, Docker, verilog, C++ (k8s)

## WORK EXPERIENCE

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**Taiwan AI Labs, Taiwan**

Feb. 2019 - Feb. 2020

*Full-time Machine Learning Research Internship*

- Build a basic Jazz melody automatic generation system, paper published.
- Build a 200,000+ music dataset
- Build a system to classify emotion of music automatically, paper published.
- Enrich the interaction between Yating(the music AI) and user: Image-conditional music generation

**Institute of Information Science, Academia Sinica, Taipei**

July 2018 - current

*Research Assistant*

- Music automatic generation
- General understanding about audio processing
- Basic understanding about speech processing and natural language processing.

## PUBLICATIONS

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**Hsiao-Tzu Hung**, Chung-Yang Wang, Yi-Hsuan Yang, Hsin-Min Wang, “Improving Automatic Jazz Melody Generation by Transfer Learning Techniques,” in Proc. Asia Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC) 2019, accepted.

**Hsiao-Tzu Hung**, Yu-Hua Chen, Maximilian Mayer, Michael Vtter, Eva Zangerle, Yi-Hsuan Yang “MediaEval 2019 Emotion and Theme Recognition task: A VQ-VAE Based Approach”, in MediaEval Benchmarking Initiative for Multimedia Evaluation (MediaEval) 2019, two-page work note paper

Wen-Yi Hsiao, Yin-Cheng Yeh, Yu-Siang Huang, Chung-Yang Wang, Jen-Yu Liu, Tsu-Kuang Hsieh, **Hsiao-Tzu Hung**, Jun-Yuan Wang, and Yi-Hsuan Yang, “Jamming with Yating: Interactive demonstration of a music composition AI”, ISMIR demo paper (non-peer reviewed two-page extended abstract) 2019 (ISMIR’19-LBD)

## COURSE PROJECTS

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Dealing with data-imbalanced problem in chest X-ray COVID-19 prediction model  
3D-morphing using Three.js