Yu-Chia Kuo

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EDUCATION

McGill University

 $Sept.\ 2024-Present$

Montréal, Canada

 $Master\ of\ Arts\ in\ Music\ Technology$

• Overall GPA: 3.9/4.0

• Coursework: Digital Sound Synthesis and Audio Processing, Cognitive Dynamics of Music Listening, Gestural Control of Sound Synthesis.

National Taiwan Normal University (NTNU)

Sept. 2022 – Jul. 2023

Music Technology

Taipei, Taiwan

• Overall GPA: 4.25/4.3

• Coursework: Electronic Music, Jazz Studies and Performance Practice, Orchestration, Music and Interdisciplinary Collaborations, Interactive System Design for Acoustic Instrument and Live Electronic Performance

National Chung Hsing University (NCHU)

Sept. 2018 – Jan. 2022

Bachelor of Food Science and Biotechnology

Taichung, Taiwan

• Overall GPA: 4/4.3

• Coursework: Classical Music Appreciation, Computer Programming and its Applications, Computer Music (an inter-collegiate course), Music Information Retrieval (an inter-collegiate course)

Publication

Hui, T. C. and **Kuo, Y.-C.** (2024b). Tale of tales: Interdisciplinary art at the intersection of music, history, sugar, and technology. In *SIGGRAPH Asia 2024 Art Papers*, SA '24, New York, NY, USA. Association for Computing Machinery [paper]

Hui, T.-C. and **Kuo**, **Y.-C.** (2024a). A concert in a vanished church: Contextualizing peace island's auditory history with modern technology. *Proceedings of the ACM on Computer Graphics and Interactive Techniques*, 7(4):1–9 [paper]

Lin, Z.-S.*, **Kuo, Y.-C.***, Hung, T.-Y., Lin, W.-Y., Chu, Y.-H., Wang, T.-K., Huang, J.-H., Chang, C., Julio, C., Hsieh, G., and Su, L. (2024). S3: A symbolic music dataset for computational music analysis of symphonies. In *Extended Abstracts for the Late Breaking Demo Session of the 25th International Society for Music Information Retrieval Conference* [paper] [github]

Hung, T.-Y., Wu, J.-T., **Kuo, Y.-C.**, Hsiao, Y.-W., Lin, T.-W., and Su, L. (2024). A study on synthesizing expressive violin performances: Approaches and comparisons. arXiv preprint arXiv:2406.18089 [paper]

Relevant Projects

Research, "Improving Motif Discovery of Symbolic Polyphonic Music"

Sep. 2023 – Dec. 2024

- Journal submitted to the Transactions of the International Society for Music Information Retrieval (co-author).
- Conducted case studies on the BPS-motif dataset, analyzing motifs and visualizing results to assess structural patterns, style, and method effectiveness.

Sound Design, "Seascape Serenity"

Nov. 2023 – Jul. 2024

- 49-channel electroacoustic composition merging bioacoustics and music technology to explore human-ocean interactions.
- Transforms underwater recordings into an immersive audiovisual experience, highlighting human-made noise's impact on marine ecosystems.

Sound Design, "The Gravity Realm"

Jun. 2023 – Apr. 2024

- 10-channel sound installation.
- Collaborated with the National Museum of Nature and Science in Taichung, Taiwan.
- Explore the connections between astronomical events and experimental data and their interpretation of sound.

Research Assistant (Part time)

Aug. 2024 – Present

Distributed Digital Music Archives & Libraries Laboratory (DDMAL), McGill University

Montreal, Canada

- Automated collection and organization of musical instrument data for the Universal Musical Instrument Lexicon.
- Maintained and updated content for the DDMAL and LinkedMusic websites.

Research Assistant (Full time)

Aug. 2023 – Aug. 2024

Institute of Information Science, Academia Sinica

Taipei, Taiwan

- Guide a team in compiling extensive datasets within harmony, musical form, and texture annotation, exceeding 11,000 measures.
- Investigate the motif discovery of polyphonic symbolic data for music modeling.

Research Intern (Part time)

Jul. 2022 - Jul. 2023

Institute of Information Science, Academia Sinica

Taipei, Taiwan

- Developed a musicXML parser on symbolic music data to improve the score-to-performance system.
- Assisted with the music and motion dataset annotations of MCT Lab.

Research Study Assistant (Part time)

Feb. 2023 – Jul. 2023

National Taiwan Normal University

Taipei, Taiwan

- Designed course questionnaires and took meeting minutes.
- Created an analytical report and presented it at the seminar.

Vice Director Sept. 2018 – Jun. 2022

Idea Jazz Band (Club), National Chung Hsing University

Taichung, Taiwan

- Launched joint performance with multiple universities.
- Commercial performance (Christmas market performance/Inter-school events/Commercial cases)

SCHOLARSHIP

Outstanding Graduate Student Scholarship, NTNU, Taiwan Industry Scholarship, Nan Shan Life Insurance Company, Taiwan	Apr. 2023 Dec. 2020
Selected Performance Experience	
Society for Arts and Technology (SAT), Montreal, Canada • Labos Immersifs Residency - Sound Designer	Mar. 2025

Institute of Information Science, Academia Sinica, Taipei, Taiwan

Feb. 2024

• Taipei International Book Exhibition - Visual Designer

Korea Advanced Institute of Science and Technology (KAIST), Daejeon, South Korea

Dec. 2023

• International Symposium on AI and Music Performance - Arranger and Pianist

National Taiwan Normal University (NTNU), Taipei, Taiwan

Dec. 2022

• NTNU Interdisciplinary group x Stanford University CRRMA Online Showcase - Synthesizer

National Taiwan Normal University (NTNU), Taipei, Taiwan

2022 - 2023

- NTNU Jazz ensemble Pianist
- Baroque orchestra Violinist

National Chung Hsing University, Taichung, Taiwan

2018 - 2022

• Idea Jazz Band - Jazz Keyboardist

Workshops

IRCAM X CLAB Taiwan Sound Lab Workshop	Nov. 2023 – Present
Multimedia Artist	$Taipei, \ Taiwan$
Student-Organized Workshop on Human-Computer Interaction	Mar. $2023 - Aug. 2023$
Teaching Assistant	$Taipei, \ Taiwan$
National Music Teacher Professional Development Workshop	Oct. $2022 - Dec. 2022$
Event Planning Assistant	Taipei, Taiwan

Honors & Awards

The sixth prize, The National Student's Music Contest Finals, Piano Solo, Taiwan [video]	Mar. 2016
The first prize, The National Student's Music Contest, Piano Solo, Hsinchu, Taiwan	Dec. 2015
The second prize, The National Student's Music Contest Finals, Piano Trio, Taiwan	Mar. 2014

SKILLS

Instruments: Piano, Violin [Repertoire List]

Tools: Max/MSP, Touch Designer, Unity, Ableton Live, Pro Tools, Finale, Sibelius