# Jaden Yifan He

5765 Centre Ave, Pittsburgh, PA 15206

#### Education

### Carnegie Mellon University, School of Music/CS/ECE

M.S., Music and Technology, Fellowship

Aug 2021 – Present

Pittsburgh, PA

### University of North Carolina at Chapel Hill, iSchool

Class of 2021

B.S., Information Science; Minor, Music; GPA: 3.9/4; Graduated with honor and highest distinction

Chapel Hill, NC

#### Relevant Coursework

• Machine Learning

• Signal Processing

• Computer Programming

• Audio Production

• Information Retrieval

• Database Management

• Web Development

• Systems Design

## Experience

### Carnegie Mellon University

Sep 2021 – Present Pittsburgh, PA

Audio Engineer

• Recorded and webcast student and faculty recitals, ensemble concerts, and university events.

• Set up and managed audio equipment, and edited/mastered the recorded projects.

# Tencent Music Entertainment, Multimedia Lab

May 2019 - Nov 2020

Algorithm Research Assistant

Shenzhen, China

- Collaborated music metadata labeling for improving QQ Music's audio fingerprint algorithm by 7%.
- Managed QQ Music's database, labeled and proofread music files, and published over 3000 files online.
- Designed and built our team website, for better data storage/extraction, and the display of our research results.
- Lead and evaluated online reviews for functions of QQ Music on social media and reported weekly to the team leader.

### Universal Music Group

June 2020 - Aug 2020

Data Analyst Intern

New York, NY

- Compiled pivot and Tableau tables on sales records in eCommerce stores, and report weekly to the team manager.
- Organized and provided product information to the relevant teams for product setup.
- Monitored inventory levels for stores and requested replenish stock as necessary.

#### Raccoon Records

June 2018 - Aug 2018

Web Operation Intern

Shanghai, China

- Published over 20 Tweets weekly of the company and vinyl culture on social media to attract potential customers.
- Managed the warehouse database via SQL, labeling the ID and genre over 600 vinyl records.
- Maintained the online sales platform, handling users' purchase and return requests, made daily sales over 15 times.

### Research and Community Involvement

#### Singapore University of Technology and Design, Audio, Music, and AI Lab

June 2021 - Aug 2021

- Collborated chord and rhythm generation for video task in aiMuVi project lead by Dr. Dorien Herremans.
- Developed a GCN and Transfomer decoder to map human body movement with MIDI events.

University of North Carolina at Chapel Hill, Honor Thesis; Advisor: Dr. Jaime Arguello

Apr 2020 - May 2021

- Evaluating Collaborative Filtering Algorithms for Music Recommendations on Chinese Music Data.
- Compared Memory-based and Model-based collaborative filtering algorithms on our Chinese music dataset.

Stanford University, Center for Computer Research in Music and Acoustics

June 2020 - Aug 2020

- Implemented DeepSpeech, Crepe, and GrFNNs models for music recognition/synthesis and semantic analysis tasks.
- Implemented SCAMP framework to compose own music with Python.

New Interfaces for Musical Expression Conference, Staff

June 2021 – Present

International Society for Music Information Retrieval, Member

Aug 2020 – Present

Audio Engineering Society, Member

July 2020 - Present

Technical Skills

Languages: Python, Java, C/C++, HTML/CSS, JavaScript, MATLAB, SQL, Max/MSP, Chuck

Developer Tools: Git, Docker, Google Cloud Platform, Amazon Web Services, VS Code, PyCharm, IntelliJ, Eclipse Libraries/Frameworks: Scikit-learn, TensorFlow, NumPy, Librosa, Matplotlib, SciPy, Lucene, React, Django, Flask

Audio: Pro Tools, Logic Pro, Adobe Audition, Sonic Visualiser, Audacity, Open Music, MuseScore