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# JULIA WILKINS

## Awards

### ISMIR 2016 ThinkTank Workshop Scholarship Recipient
***August 2016***
Selected to attend sponsored ThinkTank industry preparation workshop at the International Society of Music Information Retrieval (ISMIR) Conference 2016 (New York, NY).

### Women in Computer Music Scholarship, Stanford University
***June 2015***
Awarded full scholarship to attend weeklong intensive workshop at Stanford's Center for Computer Research in Music and Acoustics (CCRMA). Worked in SuperCollider to design a text-to-sound conversion program.

## Publications

**Wilkins, J.**, Bittner, R., Yip, H., Bello, J. *MedleyDB 2.0:* New Data and a System for Sustainable Data Collection. *Late Breaking Demo of ISMIR* 2016.

## Technical Skills

***Most Confident:*** Python (NumPy, Pandas, Keras, Matplotlib, Scikit-Learn)

***Familiar*:** C++, HTML, Java, SQL, C, CSS

***Technologies:*** Git, Bash

***Music Technologies:*** Max/MSP, Supercollider, Ableton Live, Maximilian, openFrameworks

## Extracurriculars

### Women in Music Information Retrieval
***October 2016-present***
Undergraduate Ambassador responsible for promoting the involvement of women in the international MIR community.

### Northwestern Ultimate Frisbee
***September 2015-present***
Active team member and flyer, disc, gear, and newsletter graphic designer and coordinator.

## Summary

Motivated and passionate learner offering a strong background in audio-related software engineering and research. Current interests lie in machine learning and music information retrieval.

## Education

### Northwestern University | Evanston, IL | *2014-June 2018*
Graduating senior studying **Computer Science** and **Music Technology.**

*Relevant courses*: Machine Learning (in progress), Intro to Artificial Intelligence, Intro to Databases, Data Structures, Discrete Mathematics, Machine Perception of Music, Human-Computer Interaction, Multichannel Sound, Intro to Computer Graphics.

### Goldsmiths, University of London | London, UK | *2016*
Study abroad experience focused on the opportunity to take unique courses including Audio-Visual Processing and Music Computing.

## Work Experience

### Sunhouse, Inc.
**Software & Research Intern | New York, NY | *June-Aug. 2017***
Developed the research foundation of new software features for Sensory Percussion software using machine learning and audio feature extraction.

### Interactive Audio Lab, Northwestern University
**Undergraduate Researcher | Evanston, IL | *Jan. 2017-present***
Working under the supervision of Bryan Pardo on a variety of music-information retrieval and audio-based machine/deep learning projects.

### Music and Audio Research Lab, New York University
**Research Assistant | New York, NY | *June-Aug. 2016***
Developed a Python application to error-proof multitrack audio files collected for the MedleyDB dataset.

### Listen
**Intern | New York, NY | *June-August 2016***
Shadowed internal projects and worked through an independent audio branding R&D project under the supervision of the founding partners.

## Project Highlights

### VocalSet
***March 2017-present***
Curated and collected a large dataset of professional vocal samples to create a vocal technique classifier using Python and neural networks.

### HarmonizeMe
***December 2016-March 2017***
Created a Python application that harmonizes a user's melodic vocal input based on chord selection. Additionally, developed a prototype of an educational iOS version of the automatic harmonization.