

Antonis Christou

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EDUCATION

Yale University, New Haven, CT; Class of 2024

- Bachelor of Arts in Computing and the Arts; GPA 3.98/4.0; Summa Cum Laude, Distinction in Major

International Korean Language Program, Yonsei University, South Korea, 2022-2023

- Year long program fully funded by Richard U. Light Fellowship

EXPERIENCE

Software Engineering Intern @ Meta, May 2022-August 2022

- Worked on Origami Studio, a prototyping tool, and built features that are used in production by users such as WhatsApp and Spotify
- Attended meetings, participated in code reviews and generally helped shape the direction of Origami Studio

Data Structures TA, Yale University School of Engineering and Applied Science, August 2021-December 2021

- Lead office hours for over one hundred students multiple times a week to help debug projects and explain concepts
- Assist course staff with grading midterms, finals, and other examinations as well as other grading duties

RESEARCH & PROJECTS

Automatic Creation of Melodic and Chordal Chromaticism, May 2023-August 2023

- Collaborated with Professor Roger B. Dannenberg of Carnegie Mellon University on research project involving the creation of a machine learning script for adding chromaticism to purely diatonic input songs
- Parsed, cleaned, and prepared hundreds of jazz harmonizations of American folk songs for use as input to machine learning model
- Independently ran experiments with various neural architectures to find model best suited for task of making chromatic alterations
- Paper detailing findings was published in the 11th International Conference on New Music Concepts

Machine Learning Harmonizer Plugin

- Created machine learning model to harmonize melodies after gathering corpus of thousands of songs across genres such as jazz, pop, and folk as part of Senior Thesis project
- Created Max For Live plugin for Ableton Live that enables real-time harmonization of signal with inputs from midi keyboard
- Leveraged knowledge of MaxMSP, PyTorch, JavaScript, and general music production to combine machine learning model into Max For Live, enabling machine harmonizations of user-created melodies

SKILLS AND INTERESTS

- **Programming Languages:** SuperCollider, MaxMSP, C, Python, PyTorch, Swift, UNIX, Bash, C#
- **Music Instruments & Software:** Bass (electric/upright), 11 years of experience with numerous professional and national-level ensembles, have given performances at Carnegie Hall and other top halls in the United States, Logic, Ableton, Digital Synthesizers, Sibelius, Electric Guitar
- **Foreign Languages:** English (fluent); Modern Greek (working fluency, C1 level of proficiency); Korean (advanced, TOPIK Level 5 proficiency)

ACTIVITIES AND LEADERSHIP

Yale Symphony Orchestra, Principal Double Bass, 2019-

- lead and coordinate bass section and communicate with conductor in performance of advanced symphonic works

Heifetz International Music Institute, Bassist, Summer 2020

- performed with long running music festival as part of one of first ever classes of double bassists accepted to the institute

National Youth Orchestra 2, Summer 2017

Yale Daily News, Composer

Cortex Magazine, Composer