

Bishop Crowley

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EDUCATION

Carnegie Mellon University *Pittsburgh, PA* Dec 2023

Bachelor of Science, Double Major in Artificial Intelligence and Music Technology

GPA: 3.69, Dean's List Fall 2022, Spring 2022

Selected Coursework:

Modern Regression (Spring 2023), Probability Theory for Computer Scientists, Deep Learning, Parallel and Sequential Data Structures and Algorithms (Spring 2023), Signals and Systems, Computational Perception, Artificial Intelligence: Representation and Problem Solving

SKILLS

Programming Languages: Python, C, SQL, MATLAB, LaTeX

Tools: GitHub, PyTorch, AWS, NumPy, Matplotlib

PROJECTS

Deep Learning Vocal Transformer Spring 2023

- Implemented modified version of CycleGAN for style transfer of singing vocal audio.
- Gathered and formatted all data and designed neural network architecture.

MyTorch Fall 2022

- Implemented PyTorch neural network modules using NumPy for Introduction to Deep Learning, including: Linear, BatchNorm1d, Conv1d, Conv2d, RNNCell, and GRU.
- Also implemented ConvNeXt module for facial recognition and verification.

AI Counterpoint Fall 2021

- Developed program that generates original music with Renaissance musical harmony using classical artificial intelligence algorithms (local search, simulated annealing); written in C with no libraries.

Parasocial Spatial Audio Event Fall 2021

- Received grant from the Frank-Ratchye STUDIO for Creative Inquiry at CMU to create a 12-speaker spatial audio arrangement for experimental live music event.

Electronic MIDI Glove Spring 2021

- Developed gesture-tracking glove that controls DAWs with MIDI over Bluetooth connection.
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EXPERIENCE

Carnegie Mellon University Aug 2022—Present

- Undergraduate Research Assistant at the Frank-Ratchye STUDIO for Creative Inquiry.
- Assisted Associate Director in development and execution of digital archival asset management including processing, description, arrangement, and publication for scholarly use.

Bishop Ivy Music Project 2018—Present

- 3,000,000+ streams for music under the alias "Bishop Ivy."
- Praised by [Rolling Stone](#), [Clash](#), [Metal Magazine](#), [Ones To Watch](#), [Flaunt](#).
- Signed to Handwritten Records in 2021.

Wizard Radio 2018—2019

- Radio host for UK's most popular online teen radio-station, reaching 28,000+ listeners per show.