

HARRIS BUBALO

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GitHub: HarrisonBubbles ◊ **Website:** <https://harrisonbubbles.github.io/website/>

EDUCATION

Northeastern University, Boston MA

September 2020 – Present

Khoury College of Computer Sciences

Candidate for a Bachelor of Science in Computer Science and Mathematics

Expected May 2024

Honors: Dean's List **GPA:** 3.945/4.0

Relevant Coursework:

Algorithms & Data | Object-Oriented Design | Computer Systems | Database Design | Discrete Structures | Logic and Computation | Probability and Statistics | Linear Algebra | Advanced Calculus | Dynamical Systems

Clubs: FirstByte | Oasis | NUSound | Artistry Magazine | Songwriting Club

TECHNICAL SKILLS

Languages: Java | Python | Racket/Lisp | C/C++ | MySQL | HTML/CSS/JavaScript | Matlab

Software: Git | Jupyter | IntelliJ IDEA | pandas/NumPy/Matplotlib | LaTeX | JUCE | Visual Studio

Systems: Windows | Linux | macOS

PROJECTS

Oasis Distortion

September – December 2021

- Created a robust VST3 distortion plugin using C++ and the JUCE framework, as part of the Oasis project acceleration club at Northeastern University
- Presented the stable release to Oasis members through a demonstration of its music-making capabilities

Fourier Chords

May 2021

- Utilized Matlab's FFT capabilities to deconstruct waveforms and identify musical pitches
- Wrote script that can return the name of the musical chord from a given audio file

A Comparative Study of Boston's Approach to COVID-19

March – April 2021

- Processed COVID-19 and census data from various U.S. cities using Python and the pandas library
- Examined municipal decisions in the context of the pandemic, and compared Boston to other cities
- Discussed how the pandemic exacerbated pre-existing problems in each city, as part of our final presentation for the INSH 2102 course at Northeastern University

EXPERIENCE

Fundamentals of Computer Science Teaching Assistant

January 2021 – Present

Khoury College of Computer Sciences, Boston, MA

- Led labs and office hours to help students understand fundamental computer science principles
- Graded assignments, quizzes, and exams in a timely manner

Program Alum

July 2019

MIT Beaver Works, Cambridge, MA

- Engaged in machine learning lectures given by Lincoln Lab researchers, particularly in the context of medicine
- Utilized Python, pandas, and Scikit-learn to predict an NFL player's likelihood of developing CTE
- Presented findings at poster session at end of program, attended by hundreds of students and family members

INTERESTS

Playing guitar, Reading philosophy, Attending local concerts, Music production, Fighting video games, Writing album reviews

References available upon request