

Joseph Cleveland

<https://joecleveland.github.io>

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EDUCATION	Ithaca College Computer Science B.S. Graduated Magna Cum Laude. May, 2020
TECHNICAL SKILLS	Languages : C/C++, Java, Python, HTML/JS Frameworks/Tools : Flask, NodeJS, Git, Unix Terminal Data Science : Pytorch, Keras, Numpy/SciPy, Librosa
EXPERIENCE	<p>Music Technology Researcher - Ithaca College Summer 2019 - Present Researched the applications of machine learning to music recommendation and audio synthesis. I was the first author for a paper from our lab on using neural networks to assess the audio similarity of songs. I presented the paper at ML4MD 2020, an ICML workshop.</p> <p>Teaching Assistant - Computer Science and Foreign Languages - Ithaca College Fall 2018 - 2019</p> <ul style="list-style-type: none">• Data Structures Assisted students in completing programming assignments during lab sections. Course was taught in c++ and focused on the implementation of data structures, memory management and searching algorithms.• Computer Organization Systems Hosted help hours for students. Course material focused on assembly language and the organization of Unix operating systems.• Introductory Italian Taught weekly language lessons to complement lectures. Created lesson plans with professor to engage students in speaking and listening practice while reinforcing grammar concepts.
PROJECTS	<p>Guessong.io Fall 2018</p> <p>Worked in a team of 3 to develop a real time multiplayer web game. Back end was implemented in Python/Flask and SQL with a JS/Jquery front end. Web sockets were used for server client communication. Interfaced with the iTunes API to retrieve song audio. Deployed server on AWS.</p> <p>Independent Study in Compiler Design Spring 2019</p> <p>Studied the theory and implementation of compilers. Designed a grammar in Baukus-Naur form for simple programming language. Implemented a simple compiler for this language with a parser, intermediate representation, and a back-end targeting a subset of x86 assembly.</p>