BRIAN ZHOU

brianzhou21@gmail.com · (914) 806-0295 · [LinkedIn](#)

EDUCATION

Carnegie Mellon University   August 2021 - Present
Bachelor of Computer Science and Arts (BCSA) in Computer Science & Oboe Performance   Pittsburgh, PA

WORK EXPERIENCE

Juji, Inc.   San Jose, CA (Virtual)
AI Intern   May 2022 - August 2022

- Created cognitive AI assistant that provides customized music genre recommendations based on real-time personality analysis
- Designed and implemented Wiki search functionality for AI chatbots using **Clojure** and **MediaWiki API**
- Performed literature review on music personality analysis including Big Five Index and personality tests

Hoff-Barthelson Music School   Scarsdale, NY
Music Teacher Assistant / Tutor   January 2017 - August 2022

- Taught beginner to intermediate level piano classes to a diverse student body ranging from ages 4-17
- Prepared students for weekly group and solo performances by delivering confidence-building concepts and skills
- Developed individual lesson plans through collaboration with faculty to fit the progress of each student

PROJECTS

Music Recommender Chatbot *Juji, Inc.*   May 2022 - Present

- Designed a seamless chatflow containing over 150 messages using **ClojureScript** and **Python**
- Generated numerous question-answer models to improve user conversation response quality and chatbot personality
- Integrated and combined a self-report Big Five Inventory Personality (BFI) test and a response-inferred BFI in real-time to provide a customized music genre recommendation to the user

Reverb *Term Project - Fundamentals of Programming and Computer Science*   December 2021

- Designed a rhythm-tapping, audio-visualizing game with one's imported music and window-shaking animations that play along with the beat in **Python**
- Utilized PyAudio and NumPy to continuously process and graph audio data, frequency, and physics of sound for real-time dynamic visualization
- Employed Object-Oriented Programming to support beat detection, animations, and button/dot generation
- Recorded a video demonstration: https://youtu.be/O4jqRHnBuZI

RELEVANT COURSEWORK

15-213 - Introduction to Computer Systems	Current
67-250 - The Information Systems Milieux	Current
15-251 - Great Ideas in Theoretical Computer Science	Fall '22
15-150 - Principles of Functional Programming	Fall '22
15-122 - Principles of Imperative Computation	Spring '22
21-127 - Concepts of Mathematics	Spring '22
15-112 - Fundamentals of Programming and Computer Science	Fall '21

SKILLS

Programming Languages: Python, C/C++, SML/NJ, Clojure, HTML, CSS
Software: Adobe After Effects, Adobe Photoshop, Postman, Git, Spacemacs, LaTeX, Microsoft Office Suite
Spoken Languages: English, Mandarin Chinese