max zhang

projects

Wavey

Digital Signal Processing

03/2021

Architected and developed waveform visualizer with Typescript and React.JS. This client-side application displays a stylized waveform of an uploaded song (or other audio types) on the page. Adjustable parameters allow for a tailored look.

Audio processing consists of sampling and normalizing; future plans to analyze frequency, real-time transform. Source code at github.com/chetbae/wavey.

Boook

Frontend Development

01/2021

Designed and coded book tracker application using Typescript, ReactJS (Hooks), styled-components, and GitHub Pages to give users the satisfaction of compiling a stack of books in a virtual medium.

Prototyped during HackTheNorth2021, 'Boook' is a simple yet aesthetic to-do list for readers, designed and implemented with reusable and custom-themed components.

Restaurant Menu Display

Software Development

12/2020

Engaged in design discussions and implemented code from ideation to deployment to produce an interactive software for managing an overhead display using Java (JavaFX).

Collaborated on key features in an agile environment, frequently discussing optimal software design principles, contributing, and rebasing using Git/Gitlabs.

skills

Java C/C++ Python Javascript Typescript HTML / CSS

Typescript Matplotlib (Python)
HTML / CSS Figma
languages tools

Git (Github, Gitlab)

ReactJS

Data Structures and Algorithms

NodeJS

Digital Signal Processing

Firebase

UX / UI Design Process

competencies

school McGill University

09/2018 - 05/2023

BM Double Major in Computer Science + Music Performance

GPA: 3.78

Algorithms and Data Structures Computer Science Foundations

Algorithm Design Calculus
Software Design Linear Algebra
Computer Systems Discrete Mathematics

Software Systems Probability

Experience

Orchestra Manager

McGill University

09/2019 - 05/2020

With efficient set-up and library management, increase productivity during rehearsal by 10%.

Act as a line of communication between director and musicians outside of meetings to keep the band up-to-date with latest repertoire and concert information.

Musician

Vancouver / Montréal

2016 - ongoing

Perform outstanding repertoire ranging from jazz, classical, to funk music for various types of gigs and events.

Engage listeners in a compelling musical experience, adding to the overall entertainment of the event to create an unforgettable and unique night.