Stephen He

STEPHENXHE@GMAIL.COM

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STEPHENXHE.GITHUB.IO

EXPERIENCE

Full Stack Engineer
Audioworks | Jan 2021 - Aug 2021

- Developed the apps LMS, working with music educators to build a system for uploading and delivering content from the ground up
- Greatly improved app stability by implementing React Query for handling API calls and loading resources
- Designed and refactored endpoints and database schemas to establish a reusable and efficient codebase
- Mentored incoming interns, assigning work and acting as a manager in the absence of a dedicated PM

Mobile Engineer
Audioworks | Sept 2020 - Dec 2020

- Overhauled UI/UX and was heavily involved in the ideation and design of the app and its features
- Researched the feasibility of integrating a JUCE application with React Native and Xamarin Forms

Firmware Engineer
Domio Sports | Jan 2020 - Apr 2020

- Improved battery life by 40% using DSP and volume automation
- Complete development of the Wireless Handlebar Remote
- Utilized concurrent programming to detect timeout errors and ensure 100% success rate during batch production

Firmware Engineer
Imagine Communications | May 2019 - Aug 2019

- Developed firmware for synchronizing audio embedding during video standard conversion
- Implemented support for Dolby E alignment on Selenio Network Processor and achieved a <1% packet loss

PROJECTS

RTOS

- An operating system running on a LCP1768 MCU written for extra credit
- Features such as context switching, priority inheritance, and semaphores implemented in C and ARM assembly

Languages

Javascript

C/C++

C#

Python

HTML/CSS

Tools

React.js / React Native

Node.js

Socket.io

Pug / Jade

Xamarin Forms

Figma

mongoDB

Microsoft Azure

Docker

Git

Education

B.ASc

Mechatronics Engineering

University of Waterloo

2018 - 2022