[Text

Description automatically generated with medium confidence](mailto:stephenxhe@gmail.com)[Text

Description automatically generated with medium confidence](https://github.com/stephenxhe/)

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Description automatically generated with medium confidence](https://www.linkedin.com/in/stephenxhe/)

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| --- |
| **Languages**  Javascript  Python  C/C++  C#  Kotlin  SQL  HTML/CSS    **Tools**  React.js / React Native  Node.js  OpenCV  mySQL  Xamarin Forms  Figma  mongoDB  Git  Microsoft Azure  **Education**  B.ASc  Mechatronics Engineering  University of Waterloo  2018 - 2022 |

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| 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  **Capstone Project – Paintball Sentry Gun**   * A paintball gun that automatically tracks targets using OpenCV, TensorFlow, and YoloV3 machine vision * Made use of multithreading and intelligent self-correcting code to enable the program to run in real time on CPU |

[A picture containing text

Description automatically generated](https://stephenhe.me/#/)Graphical user interface, application

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