

Jason Shao

(438)-370-9345 | [✉ Tianzhen.shao@mail.mcgill.ca](mailto:Tianzhen.shao@mail.mcgill.ca) | [🌐 linkedin.com/in/jason-shao](https://www.linkedin.com/in/jason-shao) | [🌐 jasonshaoportfolio.com](https://jasonshaoportfolio.com)

Skills

Programming Languages: Java, C++, C, Assembly, HTML/CSS, JavaScript, AppsScript, Python, Bash, Ocaml
Frameworks/Tools: Scikit-Learn, MediaPipe, VUE.js, Git, Django, Unity, QlikSense, Excel, Google Workspace, Big Query, OpenCV, SpringBoot, React, Node.js

Education

Bachelor of Software Engineering, Minor in Applied A.I. | McGill University Sep 2022 – May 2026
Courses: Applied Machine Learning, Operating System, Database System
High School Diploma | Stanstead College Sep 2019 – Jun 2022
Recipient of the Arthur E. Curtis Jr. Award (awarded to the top student entering an engineering program)

Work Experience

Certification, Software Development Intern | Airbus Canada May 2024 – Aug 2024
• Proposed and Integrated solutions for data tracker tool using Google **Apps Script** to eliminate stale data and automate the certification processes, overall enhancing workflow efficiency to save up to 30 hours per week.
• Created both analytical and tactical dashboards using **QlikSense** and **Excel** to visualize dynamic data from the certification process and give data-driven recommendations for product improvement.

Front-end Developer Intern | Langying Education Jun 2021 – Aug 2021
• Developed the teacher-student interaction software using **JavaScript**, **HTML/CSS**, and **VUE.js** framework to beautify and improve the user experience.

Purchasing Intern | Jaguar Land Rover May 2023 – Aug 2023
• Assisted in the development and execution of procurement strategies, negotiated with suppliers to optimize cost savings and efficiency, and actively engaged in workshops, such as **AWS** cloud services.

Projects

Dance Heroes | CodeJam 14 Hackathon - Committee's Choice Winner Nov 2024
• Enabled players to simply drag-and-drop any music file to generate a unique, AI-driven dance routine tailored to their chosen track.
• Combined real-time body tracking (via **MediaPipe**) with an automatically generated 3-D model dance routine, providing accurate scoring and instant feedback as players match their movements to the newly created choreography.

ParkinSync | McGill Biomechanics Club Sep 2024 - Present
• Contribute to a cross-functional data portal team in designing and developing full-stack software using **React** and **Flask** that visualizes EMG data from Parkinson's disease patients, aiding in the development of tremor-suppressing exoskeletons and improving clinical diagnoses.

HandGesture Calculator Aug 2024
• Developed a contactless calculator that operates in real-time based on hand gestures with less than 10ms latency using computer vision.
• Created custom gesture recognition algorithms using **MediaPipe** and **Scikit-Learn** to identify 20 different specific hand movements for calculator operations.
• Using **Python Tkinter** GUI toolkit to create interactive UI to control and display the calculation result.

BitterBeans | McGameJam 10 Jan 2024
• Developed BitterBeans, a Unity-based mystery murder game where players investigate suspects and crime scenes as a detective. Utilized **C#** to implement interactive elements, dynamic puzzles, and polished visuals and sound effects.

MP3Scorer | CodeJam 13 Hackathon Nov 2023
• Developed MP3Scorer, an application that converts MP3 files into sheet music by using audio processing models to extract melodies and recombine them for instruments like piano and violin. Handled backend development with **Flask**, implemented the audio processing model, and employed the **VexFlow** library to generate readable, instrument-specific sheet music.