Aarjav Jain (he/him) Computer Engineering Student

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TECHNICAL SKILLS

Programming Languages: Python, C, C++, Java, HTML/CSS, Javascript,
Frameworks and Applications: React.js, MATLAB, SolidWorks
Software Tools: Git, Visual Studio Code, IntelliJ, STM32Cube IDE, Arduino IDE,

EDUCATION

University of British Columbia   **Expected Graduation: May 2027**
Bachelor of Applied Science - Computer Engineering   **CGPA: 4.33**
Related Courses:
- Introduction to computer engineering design: 97%
- Linear Systems: 94%

ENGINEERING STUDENT TEAMS

Solar, UBC   **September 2023 – Present**
Embedded Systems Engineer
- Developed embedded software and programmed computer hardware for embedded devices.
- Proficient in utilizing C/C++ with STM32Cube IDE for controlling and managing various circuit boards.

AgroBot, UBC   **January 2023 – May 2023**
Applied AI Developer
- Collaborated in an agile software development environment to discuss our CNN model's progress.
- Developed a CV algorithm to contour crops and eliminate weeds in plant images with 94% accuracy.
- Trained a YOLOv8 model using Roboflow to determine bounding boxes on crops and weeds in plant images with 90% accuracy. Utilized LabelImg to add bounding boxes to crop images.

TECHNICAL PROJECTS

Music Beat Detector, Personal Project   **May 2023 – August 2023**
- Developed a real-time audio analysis algorithm and GUI in Python using pyaudio, OpenCV, and spotipy to detect beat elements (bass, claps, hihats), synchronize lyrics, and change screen colors accordingly.
- Created a C/C++ WinAPI GUI implementation with portaudio.h and fftw3.h for audio processing.
- Utilized React and Web Audio API to create a web implementation and to download the C/C++ GUI
- Recorded lyric videos of popular songs, sharing them on the "Lyric Light Room" YouTube channel.

OTHER WORK EXPERIENCE

Kumon North America, Calgary, Alberta   **September 2021 – December 2022**
Instructor and Marker
- Assisted and motivated students in grades K to 12 to improve their math, reading, and work ethic.
- Provided immediate feedback on students' work to guide their learning process.

INTERESTS & ACTIVITIES

- **Learning Languages (Currently Japanese)**
- **Working Out**
- **Programming Personal Projects**