William Liu

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Education

University of Alberta   June 2024
Bachelor of Science with Specialization in Computing Science   GPA: 3.4/4.0 | MAJOR: 3.8/4.0

Experience

Zebra Technologies   Dorval, QC
Technical Communication Specialist – Machine Vision   June 2024 – Present

- Co-led a cross-team initiative to create standardized process checklists across **4** teams, reducing errors, improving workflow consistency, and streamlining production of **10** manuals each month.
- Refactored QA testing for help-file releases by removing redundant cases and consolidating approximately **6** hours of individual testing into a single **1**-hour test that is performed **3** times per release cycle.
- Managed **5** physical and **4** virtual machines, and expanded Linux testing for help documentation, detecting **2%** platform-specific errors in early tests and increasing test-platform coverage by **50%**.
- Optimized the help-file web upload workflow, reducing team effort by **80%** and improving cross-team documentation delivery coordination.
- Authored Zebra Aurora machine vision SDK and flowchart-based IDE documentation, applying programming and technical expertise to user guides and reference materials in deep learning, 3D imaging, and industrial communications modules.
- Collaborated with software developers, project managers, and subject matter experts to ensure the accuracy and completeness of technical documents.

Zebra Technologies (Matrox)   September 2022 – May 2023, February 2024 – June 2024
Machine Vision Technical Writer Intern   Dorval, QC

Projects

QR Score | *Java, Android Studio, Firestore, Git*   **https://github.com/CMPUT301W22T20/QR-Score**

- Led a team of 5 in the development of an Android app that used Java, Firebase Firestore, and Android Studio which allows users to scan QR codes to earn points and compete with other users.
- Utilized Firebase Authentication to implement a streamlined, username-less, and password-less login process.
- Incorporated OpenStreetMaps API to display QR Codes in various geographic locations.
- Executed unit and UI testing through JUnit and Robotium to ensure problems are detected immediately which reduced the time for team members to fix bugs/issues.
- Adhered to agile scrum principles and utilized Git/Github for code review.

TopSongify | *Python*   **https://github.com/liu-william/TopSongify**

- Developed a Spotify playlist generator based on the analyzed user's listening activity, such as the user's short-, medium-, and long-term listening activity.
- Utilized Spotify's Web API and the Python Requests library to gather user data.

Personal Portfolio Website | *HTML, CSS, JavaScript*   **https://github.com/liu-william/williamliu.ca**

- Designed and built a responsive personal portfolio website using HTML, CSS, and JavaScript.
- Utilized Figma for mockup creation and Canva to design a personalized logo.

Skills

Languages: Python, Java, JavaScript, C, C++, SQL, Assembly, HTML, CSS/SCSS, XML
Technologies: Git/Github, Android Studio, Firebase Firestore, Figma, oXygen XML Author, CorelDRAW, Jira, Confluence

Relevant Coursework

- Software Engineering
- Operating Systems
- Software Quality
- Computer Architecture
- Data Structures
- Algorithms
- Digital Logic Design
- Discrete Mathematics
- Linear Algebra I, II