William Liu

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Education

University of Alberta
May 2024
Bachelor of Science in Computing Science, Specialization
GPA: 3.5/4.0 | MAJOR: 3.8/4.0

Experience

Zebra Technologies (Matrox)
September 2022 – May 2023, February 2024 – Present
Software Technical Writer Intern
Dorval, QC

- Contributed to the development of Matrox's machine vision and imaging analysis library SDK documentation.
- Utilized programming and technical knowledge to write, improve, and test comprehensive user guide and reference documents.
- Collaborated with software developers, project managers, and subject area experts to ensure the accuracy and completeness of technical documents.
- Updated the existing documentation with the latest features in the 3D and image analysis related libraries.
- Used oXygen XML Author for formatting and styling the documentation, and created visually appealing and impactful illustrations using CorelDRAW.

J.R. Paine & Associates Ltd.,
August 2020 – November 2020
Underground and Materials QC Technician
Edmonton, AB

- Conducted underground backfill quality control and testing of soils, concrete, aggregates, and asphalt for 4 residential subdivision sites according to city specifications and standards.
- Received positive feedback for thorough and professional inspection and testing from supervisors, project managers, and clients.

Worley Cord
May 2019 – August 2019
Civil Construction Labourer
Suncor Firebag OilSands, AB

- Performed various carpentry and labour tasks such as demolition, site preparation, material handling, and housekeeping on a 14/7 rotating shift with a crew of over 20 people, working over 10 hours each day.

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.
- Utilized Spotify's Web API and Python's Requests library to gather user data.
- Created and populated playlists using a Python script that analyzed the user's short-, medium-, and long-term listening activity.

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