William Liu

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Education

University of Alberta

Bachelor of Science in Computing Science, Specialization

May 2024 GPA: 3.5/4.0 | MAJOR: 3.8/4.0

Dorval, QC

Edmonton, AB

September 2022 - May 2023, February 2024 - Present

Experience

Zebra Technologies (Matrox)

Software Technical Writer Intern

- Contributed to the development of Matrox's machine/computer vision and imaging analysis library SDK and flowchart-based integrated development environment documentations.
- 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..

Underground and Materials QC Technician

- 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

Civil Construction Labourer

May 2019 - August 2019

August 2020 – November 2020

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

- 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

- 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

- 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

https://github.com/CMPUT301W22T20/QR-Score

https://github.com/liu-william/williamliu.ca

https://github.com/liu-william/TopSongify