zdorward@ualberta.ca

+1 (780) 566-5456

Zack Dorward

zackdorward.com

LinkedIn

Github

EDUCATION

University of Alberta   Expected May 2025

BSc Computer Software Engineering   GPA: 3.5

Notable coursework: Algorithms & Data Structures 1 – **A** (Python), Algorithms and Data Structures 2 – **A-** (C++), Object Oriented Software Design – **A** (Java), File & Database Management – **A** (SQL)

WORK EXPERIENCE

Software Engineer Intern, *Darkhorse Analytics* – Edmonton, AB   Jan 2023 – Aug 2023
- Collaborated on the Phoenix Health Dashboard front-end using **Vue** and **Typescript**. Built the intro screen, data filters panel, map layers panel, and fixed bugs across the site.
- Led the development of features on AEPHIN Facilities, including the intro panel, the home community panel, and map tooltips using **Vue** and **Typescript**. Wrote **Python** scripts to load client data into frontend of the site.
- Developed the mobile version of AAAS using **Vue**, **Typescript** and **Nuxt.js**. Created Vue components using **Storybook**.

Data Analyst Intern, *City of Edmonton* – Edmonton, AB   May 2021 – Dec 2021
- Used **Python** and **ArcGIS Pro** to develop maps used for snowplow removal in Edmonton.
- Participated in the development of two procurement contracts with the City.

PROJECTS

Alouette, *Western Engineering Competition* | Github   Jan 2023
- Represented the University of Alberta after receiving 1st place at the University of Alberta Engineering Competition in programming.
- Developed an educational wildlife game using **Vue,** and a subsequent quiz to assess learning using **React,** earning 3rd place overall.

Mindshift, *natHACKS* | Github   Jul 2022
- Built a Chrome extension with **JavaScript** that connected to a smart headband via Bluetooth and dimmed the computer screen as the user got tired.
- Analyzed and processed brain wave data read through the headband to determine the alertness of the user.

Pythons on a Plane, *HackED* | Github   Jan 2022
- Developed an animated 2D desktop game similar to jetpack joyride using Pygame, a cross-platform set of **Python** modules.
- Implemented complex in-game graphics, animations, sounds, and physics for player and enemy objects, and designed a backend database to store all-time leaderboard using **Firebase**.

LaunchPad Employees, *Personal Project* | Github   Jan 2019 - Dec 2019
- Developed an end-to-end cross-platform mobile application to handle employee scheduling using **Dart** and **Flutter,** with a backend database to store employee credentials using **Firebase**.
- Uploaded to the Apple App Store and the Google Play Store (link).

VOLUNTEERING/EXTRACURRICULARS

Merchandise Coordinator, Engineering Students' Society   May 2023 - Present
- Orders, coordinates, and sells engineering merchandise at the University of Alberta.

Vice President of Internal Affairs, Engineering Students' Society   May 2021 - May 2023
- Elected to oversee 100+ club volunteers and led a team of 5 directors who controlled recruitment, human resources, merchandise, operations, and first year students.

SKILLS

Languages: Typescript, JavaScript, Python, Java, C++, SQL

Frameworks & Technologies: Vue.js, Nuxt.js, React.js, Flutter, Express.js, Node.js, MongoDB, Git, Linux, AWS