**Allen Lu**

Edmonton, AB ▪ (604) 788-6862 ▪ [aplu@ulaberta.ca](mailto:aplu@ulaberta.ca)

**Software Developer**

Passionate, and technically well-rounded 3rd Year Computing Science student actively seeking an internship in Android Mobile app, desktop app, or general software development. Notable completed projects include individual and group Android Mobile app development projects, assembly and operating systems projects, testing, and design revisioning. Passionate in applying synergistic programming principles into collaborative app development to deliver refined and optimized mobile app tools as a cohesive system. Ability to achieve key development objectives by proactively, and effectively communicating with all contributing members. Demonstrate excellent insight, analytical, versatile, and communication skills. Skillful in Excel, Algorithm Development, real-time collaborative programming, and technical mobile app UML design.

***Areas of Expertise***

|  |  |  |
| --- | --- | --- |
| * Python | * Java | * Android Studio |
| * C/C++ | * SQL | * Microsoft Office |

***Professional Experience***

Weightlifting Android Studio Project

**Gravity – Android Mobile App April 2019 – Present**

*2-person mobile app development passion project tool tailored for Powerlifting-specific Weightlifting goals. Successfully integrates Google Firestore API to store powerlifter user profiles and progress with a current goal to offer real achievements for a game-like mechanic to encourage weightlifting goals.*

*Git link:* <https://github.com/ApluUalberta/Gravity>

* Plots user progress to a 3rd-party line graph API to track the user’s improvements
* Uses existing Epley Algorithm for 1 Rep Max Calculations
* Renders an image of weight on the bar to aid the user in loading correct weight
* All rendered Barbell images, and achievements designed to be 100% authentic according to IPF standards.

Crime Statistic Database Program

**Crime Statistic UI – Edmonton Open Data Intiative March 2019 – April 2019**

*3-person command-line desktop interface that utilizes Edmonton’s crime statistics (powered by Edmonton Open Data Initiative) to allow for 4 embedded database queries on a simple and user-friendly interface. Successfully used Pandas (3rd party API) to graph queried data, and Folium API to plot data on maps. Thorough testing made on a custom-generated sample database used to examine complex query logic and code algorithm design.*

*Git link:*

* Embedded SQLITE3 Queries in Python to create a simple UI
* Imported Pandas and Folium Libraries to plot queried data onto graphs
* Menu Entry runs 1 of 4 Queries depending on user input
* Queries use simple user-friendly language to acquire required fields to determine the information to fit user Query desires

***Education, Professional Development, and Awards***

**Bachelor of Computer Science –** University of Alberta – (Graduating April 2021)