# Allen Peng Lu

11120 76 Ave NW Edmonton, AB. T6G 0J8 || Phone: 604-788-6862 || E-mail: aplu@ualberta.ca

LinkedIn: https://www.linkedin.com/in/allen-lu-219115195/

Skilled in the deployment and maintenance of elegant Android Studio mobile applications. Experienced in fast-paced planning meetings, and scrum practices while actively adapting to the developer team's needs. Well-versed in various algorithm design paradigms using discrete mathematics. Experienced in Object-Oriented design, analysis, and implementation in teams of 2-6 developers.

## **Areas of Expertise**

Python

Java

Android Studio

Python SQLite3

• C/C++

Mips Assembly

Excel Forecasting

## **Education**

• Computing Science, 3<sup>rd</sup> Year, University of Alberta (Sept 2016 – Scheduled for April 2021)

# **Personal Projects**

### Git handle: ApluUalberta

### Weightlifting Android Studio Project (April 2019 – Present)

Gravity - Android Mobile App

Github Link: https://github.com/ApluUalberta/Gravity

- Android Mobile Phone Application suited for Powerlifting-specific weightlifting
- Utilizes Google Firestore API to keep track of User Data, progress, and achievements
- Creates a game-like achievement system that compares User's progress to real Powerlifting Federations
- Plots user work-out numbers on a line graph that can be found under the user's profile
- An integrated 1-rep-max calculator that auto-updates the user's achievements and progress

### **Mood-Tracker Android Studio Group Project (September 2019 – December 2019)**

Glo – Android Mobile App

Github Link: https://github.com/CMPUT301F19T03/GroupProject1

- Programmed in Java, tracks a user's emotional state and allows them to follow friends
- A collaboration of 6 group members using Github pull requests to encourage collaboration
- Google Maps and Firestore API to keep track of user moods, times, dates, reasons, and location
- Extensive Revisioning of App Interfaces to provide an eye-pleasing interface
- Weekly team meetings, remote communication with discord, and extensive UML re-versioning

#### LPT-Johnson Scheduling Program (September 2019 – December 2019)

File Instance Generator and Average Plotter

Github Link: <a href="https://github.com/ApluUalberta/LPT-Johnson-Scheduler">https://github.com/ApluUalberta/LPT-Johnson-Scheduler</a>

- Takes in files (-i argument) or generates 400,000 Random File instances (-r argument) with Specific format
- Schedules the specified number of Jobs, job size, and machines using LPT/Johnson Algorithm scheduling
- Takes the Average Ratios of Processing Time of specified file groups for the given algorithms and Plots them on 2d, and 3d graphs using GNU Plot

## **Hobbies**

Powerlifting, Drone Photography, RC Vehicle Modification, E-Commerce Entrepreneurship