

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 development and maintenance of elegant mobile applications while meeting time constraints. Experienced in UI and low-level module testing and troubleshooting with Arduino hardware and computer software. Well-versed in various algorithm design paradigms using discrete mathematics. Experienced in Object-Oriented design, analysis, and implementation in teams of 2-6 developers.

Core Competencies

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|---------------------------------|---------|------------------|
| • Python | • Java | • Android Studio |
| • Python SQLite3 | • C/C++ | • Mips Assembly |
| • Excel Forecasting Simulations | | |

Education

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- Computing Science, 3rd Year, University of Alberta (Sept 2016 – Scheduled for April 2021)

Personal Projects

Git handle: ApluUalberta

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

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

Arduino Powerlifting Lock Box (December 2019 – Present)

Chalk Bowl Locking Mechanism – Arduino Uno

- Programmed Arduino Project to make a Weightlifting Chalk bowl lockable
- 4-digit keypad verification password Solenoid Door lock mechanism with a 6V Relay
- Secured in a locked Plywood container, attached to a hinge and a lid.
- Reliability and testing is done by continuous release and listening to public concerns and design criticisms

Hobbies

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

Allen Lu

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January 12, 2020

Heather Finn

STEMCELL Technologies

1618 Station Street

Vancouver, BC V6A 1B6

Re: Software Development Co-op Student (8 months)

To Heather Finn,

As a passionate and fast-learning problem solver that is well-versed in developing software tools, algorithm design, and circuit technology, it is with great excitement that I have submitted my resume for consideration to be an 8-month software development intern with STEMCELL Technologies Vancouver. As an efficient and vocal team-oriented developer I have experience in Android mobile application development, testing, and presentation in combination with my experience designing and programming Arduinos to solve real-world problems. I am prepared to contribute to your company's technological goals in developing and optimizing robotic technologies while performing any risk assessments, design evaluations, and experiments necessary to ensure quality and efficiency.

I am currently in 3rd year pursuing a degree in computing science with a specialization in software practice at the University of Alberta. My focus is on using and understanding software on multiple levels, computer architecture, operating systems, and the application of discrete mathematics in algorithm design. Please look at the following project examples from my resume, which outlines the competencies that I can leverage to further the goals of STEMCELL Technologies Vancouver.

- Designed, developed, and tested an elegant and efficient Mood-Tracking Android Studio mobile application in a team of 6 developers using Google maps and Firestore API.
- Created a crime-statistic program with SQLite3 embedded Python with a terminal interface that allows the user to generate graphs and data using Edmonton's crime data.
- Currently developing a custom Arduino lock for a powerlifting gym while listening to customer concerns and criticisms to create newer and improved versions.
- Created an LPT-Johnson CPU Scheduling performance evaluator by creating 400,000 random file instances with the GNU Plot Software

My resume provides further detail about the unique skill set and passion I can bring to your team. I truly believe that my experience in programming coupled with my knowledge in software and hardware design prototyping will allow me to excel in the STEMCELL software development environment. I hope we can schedule an appointment to talk, thank you for the consideration.

Sincerely,

Allen Lu

UNIVERSITY OF ALBERTA - UNOFFICIAL RECORD

Student Name: Allen Peng Lu
(Surname last)

ID Number: 1498902

Month and Day of Birth: January 13

Date of Issue: 30-DEC-2019

September, 2016: Admitted to the Faculty of Science, Bachelor of Science General program.

Fall Term 2016 BSc General

Course	Description	Grade Remark	Units Taken	Units Passed	Grade Points	Class Avg	Class Enrl
BIOL 108	INTRO TO BIOLOGICAL DIVERSITY	B-	3.0	3.0	8.10	2.8	335
ECON 101	INTRODUCTION TO MICROECONOMICS	B	3.0	3.0	9.00	3.0	372
ENGL 103	CASE STUDIES IN RESEARCH Literature in the Wake of 9/11	B	3.0	3.0	9.00	2.8	40
MATH 114	ELEMENTARY CALCULUS I	C	3.0	3.0	6.00	2.6	140
PHYS 124	PARTICLES AND WAVES	B-	3.0	3.0	8.10	2.7	210
TOTALS			15.0	15.0	40.20		

Winter Term 2017 BSc General

Course	Description	Grade Remark	Units Taken	Units Passed	Grade Points	Class Avg	Class Enrl
ASTRO 122	ASTRONOMY OF STARS/GALAXIES	C+	3.0	3.0	6.90	2.6	180
EAS 100	PLANET EARTH	A-	3.0	3.0	11.10	2.7	261
ECON 102	INTRODUCTION TO MACROECONOMICS	B-	3.0	3.0	8.10	2.7	349
ENGL 102	INTRO TO CRITICAL ANALYSIS	B-	3.0	3.0	8.10	3.1	26
MATH 115	ELEMENTARY CALCULUS II	B	3.0	3.0	9.00	2.0	123
TOTALS			15.0	15.0	43.20		

GPA: 83.40 grade points / 30.0 units taken = 2.8

Fall Term 2017 BSc General

Course	Description	Grade Remark	Units Taken	Units Passed	Grade Points	Class Avg	Class Enrl
ANTHR 207	INTRO SOCIAL AND CULTURE ANTHR	B+	3.0	3.0	9.90	3.3	65
CMPUT 174	INTRO TO FNDTNS OF CMPUT I	B+	3.0	3.0	9.90	3.1	97
EAS 208	INTRO TO GLOBAL CHANGE	B+	3.0	3.0	9.90	3.4	117
SOC 225	CRIMINOLOGY	B	3.0	3.0	9.00	2.7	179
STAT 151	INTRO TO APPLIED STATISTICS I	B	3.0	3.0	9.00	2.2	186
TOTALS			15.0	15.0	47.70		

Winter Term 2018 BSc General

Course	Description	Grade Remark	Units Taken	Units Passed	Grade Points	Class Avg	Class Enrl
CMPUT 175	INTRO TO FNDTNS OF CMPUT II	B-	3.0	3.0	8.10	3.0	84
EAS 206	GEOLOGY OF THE SOLAR SYSTEM	B+	3.0	3.0	9.90	2.9	148
MATH 125	LINEAR ALGEBRA I	C-	3.0	3.0	5.10	2.7	150
PHIL 215	EPISTEMOLOGY	B+	3.0	3.0	9.90	2.8	29
STAT 252	INTRO TO APPLIED STATISTICS II	A	3.0	3.0	12.00	3.5	112
TOTALS			15.0	15.0	45.00		

GPA: 92.70 grade points / 30.0 units taken = 3.1

September, 2018: Admitted to the Faculty of Science, Bachelor of Science with Specialization program, Computing Science - Software Practice.

September 04, 2018: Granted credit in all courses successfully completed at this University, 2016-2018.
(60.0) Total units 60.00

**Fall Term 2018 BSc with Specialization
Computing Science - Software Practice**

Course	Description	Grade Remark	Units Taken	Units Passed	Grade Points	Class Avg	Class Enrl
CMPUT 201	PRACTICAL PROG METHODOLOGY	B-	3.0	3.0	8.10	2.4	86
CMPUT 272	FORMAL SYSTEMS & LOGIC	B	3.0	3.0	9.00	2.7	119
MATH 214	INTERMEDIATE CALCULUS I	B-	3.0	3.0	8.10	2.2	75
SOC 224	SOC OF DEVIANCE AND CONFORMITY	B+	3.0	3.0	9.90	3.0	223

TOTALS	12.0	12.0	35.10
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Winter Term 2019

**BSc with Specialization
Computing Science - Software Practice**

Course	Description	Grade Remark	Units Taken	Units Passed	Grade Points	Class Avg	Class Enrl
CMPUT 204	ALGORITHMS I	A-	3.0	3.0	11.10	2.6	90
CMPUT 229	CMPUT ORG/ARCHITECTURE I	C+	3.0	3.0	6.90	2.2	57
CMPUT 291	FILE AND DATABASE MANAGEMENT	B+	3.0	3.0	9.90	2.9	123
TOTALS			9.0	9.0	27.90		

GPA: 63.00 grade points / 21.0 units taken = 3.0

Fall Term 2019

**BSc with Specialization
Computing Science - Software Practice**

Course	Description	Grade Remark	Units Taken	Units Passed	Grade Points	Class Avg	Class Enrl
CMPUT 301	INTRO TO SOFTWARE ENGINEERING		3.0	0.0	0.00	XXX	137
CMPUT 379	OPERATING SYSTEM CONCEPTS		3.0	0.0	0.00	XXX	43
OM 352	OPERATIONS MGMNT		3.0	0.0	0.00	XXX	278
TOTALS			9.0	0.0	0.00		

Grades are Unofficial Until Approved by the Dean

Winter Term 2020

**BSc with Specialization
Computing Science - Software Practice**

Course	Description	Grade Remark	Units Taken	Units Passed	Grade Points	Class Avg	Class Enrl
CMPUT 300	COMPUTERS AND SOCIETY		3.0	0.0	0.00	XXX	24
CMPUT 325	NON-PROCEDURAL PROG LANGUAGES		3.0	0.0	0.00	XXX	111
CMPUT 382	INTRO TO GPU PROGRAMMING		3.0	0.0	0.00	XXX	53
MIS 417	TELECOMMUNICATIONS IN BUSINESS		3.0	0.0	0.00	XXX	45
TOTALS			12.0	0.0	0.00		

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