

Luke Liu

Email lukeliu@berkeley.edu
Phone +1 (510) 990-4797
Address Berkeley, CA

Education

University of California, Berkeley

Expected Graduation: May 2023

Bachelor of Arts in Computer Science, Technical GPA: 4.0

- **First-Year Coursework:** Structure & Interpretation of Computer Programs, Data Structures, Discrete Math, Designing Information Devices & Systems I, II (Linear Algebra & Machine Learning), Principles & Techniques of Data Science, Adaptive Instruction Methods in Computer Science

Oakville Trafalgar High School, Canada

June 2019

Ontario Secondary School Diploma, National AP Scholar

- **Class Rank:** 1 / 341, **Graduating GPA:** 99.2%

Skills

Programming Languages: Java, Python (proficient); JavaScript, HTML, CSS, Swift, Scheme, SQL (basic)

Spoken Languages: English, Mandarin (bilingual); French (basic)

Technical Projects

Scheme Interpreter, Python

November 2019

- An interpreter for a subset of the Scheme language that implements the Read-Eval-Print loop

Ants Vs. SomeBees, Python

October 2019

- A tower-defense game similar to Plants vs Zombies with an emphasis on Object-Oriented Programming

NutriFitness, Swift

Cal Hacks, October 2019

- An iOS app that promotes healthy active living through tracking users' daily nutrition intake and energy expenditure using a machine learning model while educating them about the impacts of their daily activities

Econergize, JavaScript/HTML/CSS

University of Waterloo EnergyHacks, June 2019

- A barcode-scanning React Native app that informs consumers about the environmental and social impacts of their daily purchases through a Firebase-backend website

BattleBots, Java

May 2019

- A virtual bot that won first place with the highest Kill-Death ratio in the school's BattleBots Tournament

Leadership Experience

President & Lead Tutor, OTHS Math Club

September 2017 - May 2019

- Boosted interest in mathematics by organizing annual school-wide contests and hosting design challenges, resulting in an increase in club membership from 15 to 70 students
- Prepared students for AP Calculus exam and University of Waterloo math contests by creating review materials and running tutorial sessions for both individuals and large groups of students

Piano & Theory Teacher, Mississauga Piano Studios

September 2017 - June 2019

- Applied innovative and personalized teaching methods to help students aged 8-50 achieve 90%+ on RCM examinations (up to Level 9 for Theory and Level 4 for Piano)
- Raised awareness of the plight of rural communities through hosting fundraising concerts and donating 100% of salary earned to WE Charity for school building projects in Ecuador

Finance Chair, Relay for Life OT Chapter

May 2018 - May 2019

- Managed a \$20,000 budget by determining allocations in consultations with other committees, creating reimbursement procedures, monitoring cash flow and compiling post-event financial statements
- Led committee training and oversaw the collection of over \$229,000 in pledges, making the event the largest and most successful student fundraiser in Canada

Achievements

Principal's Award for Student Leadership, Ontario Principals' Council

June 2019

Provincial Semifinalist, Educational Computing Organization of Ontario Programming Contest

April 2019

Provincial Finalist, DECA Ontario Competition

February 2019

Level 10 Piano & ARCT Theory, The Royal Conservatory of Music

August 2018