

# Andi Xiong Computer Engineering Student

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## EDUCATION

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**University of British Columbia**

**Expected May, 2022**

**Bachelor of Applied Science – Computer Engineering**

Completed 6/8 academic terms

Co-op: Completed 1/5 work terms; Available 4 or 8 months beginning May 2020

## COOP WORK EXPERIENCE

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**Canada Youth Robotics Club, Vancouver, BC**

**May, 2019 – August, 2018**

**Programming and Robotics Instructor**

- Delivered interactive lessons on programming and robotics to teach students principles of building robust hardware and software
- Coached and led student robotics team to win 2<sup>nd</sup> place in RoboRAVE North America's line-following challenge
- Acquired curriculum development skills by creating STEM lesson plans aimed to inspire students' curiosity and enthusiasm for science
- Gained communication and organization skills through monitoring students' progress and periodically report to supervisor and parents to facilitate students' learning

## TECHNICAL PROJECTS

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**Anonymous Chatting App (UBC)**

**September, 2019 – November, 2019**

- Developed an Android app enabling users to chat anonymously with people within certain proximity on topics of interest such as sports events or food suggestion
- Devised a matching algorithm to recommend nearby chatrooms based on user's history and preference so users can find chatrooms more easily
- Delegated tasks to team members following agile development framework to increase communication and collaboration

**Braille Printer (UBC)**

**March, 2019**

- Designed and built a braille printer (using Raspberry Pi) to help make communication more accessible to visually impaired people
- Explored the concept *Internet of Things* through building a website so users can submit print jobs which will be queued on the printer automatically (Flask, HTML, JavaScript)
- Established mutual communication where a visually impaired individual can enter braille through a keypad, and words from a braille illiterate individual can be translated to braille characters

**Sentiment Analysis of Text Documents (UBC)**

**September, 2018**

- Utilized Microsoft's Azure Cognitive Services to write a Java program for calculating sentiment of a given text document
- Originated an algorithm to group similar documents by word choice and sentiment similarity, enabling prediction of author given a large set of document

## ENGINEERING STUDENT TEAM

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**UBC Launch Pad**

**January, 2019 – Present**

**iOS Developer**

- Worked in team of eight to build an iOS app for Access Youth (a non-profit organization) which facilitates youth outreach and empowerment, helping thousands of youth in the tri-cities area
- Implemented counselling bus tracking service on staff's side (iOS) for broadcasting driver's location which allows youth in need to accurately locate the bus and estimate time of arrival
- Adopted trunk-based development model including continuous integration and delivery to better satisfy stakeholders' requirements

## OTHER WORK EXPERIENCE

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**UBC Department of Mathematics**

**September, 2019 – Present**

**Undergraduate Teaching Assistant**

- Helped students become better learners at math and develop critical thinking skills by asking thought-provoking questions and giving hints
- Grouped and returned thousands of student assignments to increase efficiency and better protect student's privacy

## VOLUNTEER EXPERIENCE

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**Orchard Commons Musical Production Company, Vancouver, BC**    **November, 2017 – March, 2018**

**Band Coordinator / Keyboard**

- Recruited and managed pit band of five, communicated with band members and constructed a sense of community
- Understood every instrument part and gave constructive feedback on musicality and performance
- Recommended and handled purchase of music stands to benefit future productions
- Performance sold out for all three nights

## AWARDS

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Rockwell Automation Canada Scholarship in Electrical and Computer Engineering	2018
UBC Engineering Entrance Scholarship	2017
UBC Tuum Est Award	2017

## PROFESSIONAL AFFILIATIONS

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Institute of Electrical and Electronics Engineers

2018 – Present

## INTERESTS & ACTIVITIES

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- Interests: theatre, films, yoga, hiking, swimming, travelling
- Hobbies: singing, playing piano, reading