

# Lixian Liu

8-9133 Bayview Avenue, Richmond Hill, ON, L4B4C5 | 437-999-1533 | lixian@my.yorku.ca

## EDUCATION

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### York University

ON, Canada

Candidate for Hons. B.Sc. in Computer Science

January 2018 – Expected May 2021

- GPA 8.73/9.0

### University of Toronto

ON, Canada

Hons. B.A. in Economics & Studio Art

September 2011 – December 2014

## RESEARCH EXPERIENCE

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### Data Mining Lab at York University

ON, Canada

*Undergraduate Researcher, Supervisor: Professor Aijun An*

May 2020 – August 2020

- Video Presentation: <https://youtu.be/tndvjygV9XU>
- Aided the work of Dr. Mufleh Al-Shatnawi, who developed a Multiple Pedestrian Tracking (MPT) algorithm for IBM to aid airport security, by developing a web application in Python and OpenCV that allows users to select various camera feeds and display pedestrian detection and tracking results in order to visualize the results of the MPT algorithm for the IBM specialists
- Worked in a GPU server and CONDA environment and learned the basics of running a deep learning algorithm
- Attended weekly seminar to stay up to date on the current research topics in data mining

### Data Mining Lab at York University

ON, Canada

*Research Assistant, Supervisor: Professor Aijun An*

January 2020 – April 2020

- Collaborated with a graduate student who developed a new neural network algorithm that can run faster than a convolutional neural network to develop a web application in Python that visualizes the real-time running speed of the two algorithms with graphs
- Gained experience in a lab environment and learned the fundamentals of data visualization and neural networks

## AWARDS AND GRANTS

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2020 **NSERC Undergraduate Student Research Award**, awarded a stipend of \$8,000 to conduct research in the natural sciences and engineering

2019 **OSOTF Science Award**, given to the undergraduate student with the highest Faculty grade point average

2019 **York University Continuing Student Scholarship**, granted to undergraduate students who have achieved outstanding academic results

## WORK AND TEACHING EXPERIENCE

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### FutureUp Education, Inc.

ON, Canada

*Computer Science Tutor*

May 2019 – Present

- Tutor a group of undergraduate students in different programming languages, such as C, Shell Script, and Java
- Prepare coding questions and weekly teaching slides

### ArtSky Learning Centre

ON, Canada

*Art Instructor*

May 2016 – November 2016

- Taught a group of young children about modern drawing to increase their creativity
- Wrote appropriate critique for each art piece and communicated with parents about learning outcomes

**Rogers Communication, Inc.***Sales Associate***ON, Canada**

December 2014 – January 2016

- Increased the sales record by exceeding the weekly sales target; received top 5% sales award for Toronto region
- Wrote weekly reports covering the sales activity and performance of our store
- Interacted with customers in a patient and friendly manner in all situations

**LEADERSHIP EXPERIENCE**

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**York University***Peer Tutor***ON, Canada**

January 2020 – April 2020

- Provided one-on-one peer tutoring for undergraduate students in the course of Discrete Mathematics

*Class Representative for Professor Jeff Edmonds*

September 2019 – December 2019

- Scheduled study sessions for students in the course of Fundamentals of Data Structures to review materials in a group and was responsible for a study environment that facilitated students improving individual grades
- Communicated feedback received from classmates to the professor

**SKILLS**

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**Art Portfolio:** <http://berlinbolin.wixsite.com/arts>**Computer/Technical Skills:** C, Java, JavaScript, Python, HTML, CSS, SQL, Unix, Shell Script, Microsoft Office, Photoshop**Languages:** English, Cantonese and Mandarin