## THOMAS ZHOU

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## **EXPERIENCE**

### **FIRST Robotics Team Leader**

#### FRC Team 4914

- **September 2017 June 2021**
- Toronto, ON
- Responsible for assigning tasks to team members, communicate to teacher supervisors, as well as organize weekly meetings
- Designed the robot using Autodesk Inventor CAD (computer-aided design) software
- Organized and led workshops to train and educate new members joining the team

Autodesk Inventor Java Python CAD CAM Hardware

### String Orchestra Leader

### Victoria Park Collegiate Institute

- **September 2019 May 2020**
- ▼ Toronto, ON
- Tasks as a leader include scheduling sectionals for various instruments in the orchestra and communicating with the conductor on soloist information
- Won gold at OSA (Ontario Strings Association) in 2018

## **VOLUNTEERING**

# Durham Chinese Culture Center Soccer Club Soccer coach and volunteer

- **May 2016 May 2020**
- Tasks include teaching kids soccer skills, refereeing games, and helping coaches with various tasks

# Toronto Public Library and FIRST NXL Lego Robotics Teacher

- March June 2019
- Taught kids ages 7-9 how to build and code lego robots at Fairview Library
- Worked in a team environment to provide the best experience to promote STEM in youth

## **SKILLS**

## **Programming Languages**



#### Other

Power Tools | Leadership

## **PROJECTS**

### LeagueAl

#### **Prediction AI For League of Legends**

- League AI is an application that predicts the winner of a league of legends game live.
- Uses the live client data API to collect game data
- Data is fed into a neural network trained using 10000 games to identify trends and patterns that will predict which team wins
- Officially Approved by Riot Games

Python	tensorflow	keras	Riot API
JSON	Tkinter		

#### **IOT Plant Waterer**

## Plant watering system using Blynk with an ESP8266 and Arduino

- **■** June 2021 **○** thomaszhou01/WaterPlant
- An automated plant watering system built using Blynk with an Arduino and ESP8266
- Automatically waters plant when soil moisture sensor detects too low of a moisture in soil



### Attendance System

#### **String Orchestra Attendance System**

- An attendance system for my school's string orchestra
- Uses a text file as a database to save and retrieve student information

Java	Java Swing	Database
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## **EDUCATION**

# University of Waterloo Mechatronics Engineering

**2021 - Ongoing** 

Waterloo, ON

Relevant courses: Calculus, Linear Algebra, Mechatronics Engineering

## Victoria Park Collegiate Institute Ontario Secondary School Diploma

**2017 - 2021** 

▼ Toronto, ON

Academic Average: 97%

## Victoria Park Collegiate Institute International Baccalaureate Diploma Programme

**2019 - 2021** 

Toronto, ON

IB Score 41/45