# **RYAN CHEN**

**Electrical Engineering** 

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- Technical Skills: Object-Oriented Programming, Data Structures, TCP/IP Ethernet
- Programming Language: Java, C++, Python(Basic Proficiency)
- Software: VS Code, Git(VSCode), JIRA, Altium, MATLAB, Microsoft Office, Linux

## **EXPERIENCE**

## **Coding Club**

- Learning and practicing Java in preparation for the Canadian Computing Competition.
- Developed remote flight control for a drone.

#### **Peer Tutor**

- Led one-on-one tutoring sessions by simplifying challenging topics.
- Improved classmates' academic performance in AP Calculus and Physics.

## Waterloo Aerial Robotics Group(WARG)

- · Early stage PCB design using Altium
- Make drone that participate competition, more information please visit https://www.uwarg.com/

#### **PROJECTS**

## **Restaurant Management System**

Jun 2024

Java

- Developed to enhance efficiency and reduce labor requirements in restaurant management.
- Utilized objects, classes, and linked lists to manipulate and organize data.
- Applied the I/O package to enable data storage in external files.
- Prioritized specificity, readability, and efficiency while adhering to general coding standards.

## **Visualization of Calculus**

Mar 2024

Python, Manim(Extension)

- A learning tool that translates complex mathematical concepts into visual explanations.
- Selected as a showcase project for AP Calculus during Campus Open Day.

## PvZ Script Project

2023-2024

C++, AssemblyVsZombie(Extension)

- Developed multiple automated in-game scripts for endless survival.
- Enhanced gameplay experience by programming techniques and implementing highprecision operations to achieve theoretical expectations.

## **EDUCATION**

#### **University of Waterloo**

2024 - 2029