

## EDUCATION

Troy High School 2020 - 2024  
Engineering Tech Pathway

## PROGRAMMING LANGUAGES

C++	Java
C#	Scratch
HTML	CSS
Python (NumPy, OpenCV)	

## TECHNOLOGIES

Git Ver. Control/Collaboration	
Jupyter Notebook	
Unity	Unreal Engine
SOLIDWORKS	Fusion 360
VirtualBox	VMware
GNU/ Linux	WPILib
Windows Consumer	
Windows 2019 Server	

## TECHNICAL KNOWLEDGE

### Cyber

- Team Captain
- Platinum all years
- Semi finalist two years
- Windows Server
- Windows Intermediate instructor

### Engineering

- Contributed to robot climber system
- Ball recognition code was incorporated into final product
- Webmaster

### Teaching

- Instructed english to Chinese Children overseas since 2020
- Children can now hold full conversations about their day

## WORK EXPERIENCE

### Troy Robotics

Build, Software, and Design Member  
Webmaster

Fullerton, CA

Jan 2021 – Present

Jan 2022 – Present

### Ignia Education

Teacher

Diamond Bar, CA

Mar 2020 – Sep 2022

### CyberPatriot

Instructor

Fullerton, CA

Sep 2021 – Present

### NHS

Member

Fullerton, CA

Sep 2022 – Present

### Orchestra

Violin Section Leader

Diamond Bar, CA - Fullerton, CA

Sep 2022 – Present

## PROJECTS

### Colored Ball Recognition

[Team GitHub](#)

[FRC2022-BallRecognition](#)

Python (NumPy, OpenCV)

- Troy Robotics code for ball detection and recognition
- Code deployed into 2022 FRC season build pipeline

### Self Balancing Skateboard Fabrication

[Blog](#)

C, Arduino, PWM, PID, IMU 6 Axis Gyroscope Accelerometer

- Fabrication using Troy Robotics Workshop tools
- Built using old obsolete FRC hardware
- Blog documenting the complete fabrication process

### Personal Website

[Website](#)

HTML, CSS

- First Written in Middle School
- Incorporated web emulation for retro game consoles
  - Playable example deployed on Revision 7
  - Added netplay functionality

### Robotics Website

[Website](#)

HTML, CSS, JavaScript

- First Webmaster to completely handwrite a website

### Local Group Policy Settings

[Local-Group-Policy](#)

inf (Windows Setup Information)

- File included for windows security hardening

### Gentoo Configuration

[Configuration](#)

Xorg, DWM

- Custom configuration for Lenovo Thinkpad Ivy Bridge chipsets
- Purpose built kernel for maximum battery life

