

PETER KIM

Plymouth, MI 48170

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SKILLS & ASSETS

Proficient in Programming Languages: C++, Python, HTML5/CSS3/JavaScript, Java

Software: Git/GitHub, Visual Studio, Visual Studio Code, XCode, Autodesk Inventor & Fusion, Adobe Premiere Pro & Illustrator

EDUCATION

Washtenaw Community College

Washtenaw County, MI

Dual Enrollment

GPA: 3.60/4.00

Courses: Calculus III (MTH 293), Linear Algebra (MTH 197), Differential Equations (MTH 295), Introduction to Programming with C++ (CPS 171), Object Features of C++ (CPS 271), Data Structures with C++ (CPS 272)

Salem High School

Canton, MI

GPA: 4.32/4.00

Highlights: Engineering Academy, National Honors Society, Captain Cross Country, Varsity Track & Field

COLLABORATIVE PROJECT EXPERIENCE

Automated Snow Plow

Designer, Engineer, & Programmer

September 2024 - May 2024

- Contributed to the creation of an Automated Snow Plow with 3 high-school classmates as an Engineering Capstone project
- Used a camera to detect location of robot to work with many types of driveways and sent data via Wifi to the robot to plow snow
- Wrote the pathfinding and Arduino code for the robot

INDIVIDUAL PROJECTS

Missile Pathfinding Simulation - <https://youtu.be/AyyewS0l8y8?si=OvVeHy9T1JZgpgim>

- Uses C++ and SFML to visualize a missile pathfinding simulation that incorporates ray marching, convex hull, and pursuit curve algorithms

3D Rendering Software - <https://github.com/PJ1229/3D-Rendering-Software-SFML>

- Uses SFML & Eigen Library to visualize 3D math functions and linear transformations
- Programmed a dynamic camera to allow the user to move

Problem Bank Website - https://github.com/PJ1229/PDL_Problem_Bank_Website

- Current project for the Plymouth District Library that allows community members to submit problems so Team STEM can tackle them with designs at the Lab

WORK EXPERIENCE

Summit On the Park

Lifeguard

May 2024 - Present

- Enforce water safety and administer first aid incase of emergencies
- Certified in CPR and FBAO.

Plymouth District Library

Team STEM Member

August 2023 - Present

- Manage lab equipment, help patrons, and learn software such as Adobe Premiere Pro, Cricut, and GlowForge
- Currently working on a Problem Bank Website

Math-Corps UM Dearborn

Volunteer

July 2023 - August 2023

- Help middle and high school students with mathematics

Fresh Thyme Market

Cashier

May 2023 - August 2023

- Deal with money and customers, manage food and bag groceries, supervise the self-scan services, help push carts and clean the store during closing.