PETER KIM

Plymouth, MI 48170
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SKILLS & ASSETS

Proficient in Programming Languages: C++, Python, HTML5/CSS3, Java
Software: Git/GitHub, Visual Studio, Visual Studio Code, XCode, Node Project Manager, Autodesk Inventor & Fusion, Adobe Premiere Pro & Illustrator

EDUCATION

Wayne State University   **Detroit, MI**
Bachelor of Science in Electrical and Computer Engineering, Minor in Computer Science & Mathematics   *Graduation: May 2027*
Course Highlights: Discrete Mathematics (MAT 2860), University Physics for Scientists (PHY 2170), Differential Equations and Matrix Algebra (MAT 2150), Introduction to Programming and Computation (BE 1500)

Washtenaw Community College   **Washtenaw County, MI**
Dual Enrollment   *August 2023- May 2024*
GPA: 3.70/4.00
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   *September 2020- June 2024*
Highlights: Engineering Academy, National Honors Society, Captain Cross Country, Varsity Track & Field

COLLABORATIVE PROJECT EXPERIENCE

Automated Snow Plow   **Canton, MI**
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 / PORTFOLIO

Website - www.pjk1m.com
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
- 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   **Canton, MI**
Lifeguard   *May 2024 - July 2024*
- Enforce water safety and administer first aid incase of emergencies
- Certified in CPR and FBAO.

Plymouth District Library   **Plymouth, MI**
Team STEM Member   *August 2023 - Augusts 2024*
- Manage lab equipment, help patrons, and learn software such as Adobe Premiere Pro, Cricut, and GlowForge
- Created Problem Bank Website

Math-Corps UM Dearborn   **Dearborn, MI**
Volunteer   *July 2023 - August 2023*
- Help middle and high school students with mathematics

Fresh Thyme Market   **Canton, MI**
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.