PETER KIM

xxx-xxxx | x@x.com | pjk1m.com | github.com/PJ1229 | linkedin.com/in/pjk1m/

EDUCATION

University of Michigan College of Engineering

Ann Arbor, MI

Bachelor of Engineering in Computer Engineering, Minor in Entrepreneurship

Expected Graduation: May 2027

GPA: 4.00/4.00

Course Highlights: Data Structures & Algorithms (C++) • Discrete Math • Marketing Management Organizations: Filipino American Student Association • Korean American Student Association

Wayne State University College of Engineering

Detroit, MI

Completed coursework towards Bachelor of Science in Computer Science

Attended Aug 2024 – May 2025

EXPERIENCE

Yazaki North America

Canton, MI

Software Engineering Co-Op

Aug 2025 – Present

Software Engineering Intern

May 2025 – Aug 2025

- Reduced engineering drawing review time by 88% (from ~128 hours to <16 hours) within the P800 Ford Program by creating an automated PDF markup tool using Python and OCR and presented at Worldwide Engineering
- Achieved an estimated \$44,000 cost savings per frame harness by correcting missing spot tapes in the P800 harnesses
- Deployed an intuitive automated markup application for engineering drawings, streamlining quality checks

OOTD – Fashion App Startup

Ann Arbor, MI

Co-Founder & CEO

Feb 2025 – Present

- Co-developed a React Native mobile app, assisting with feature planning, UI feedback, and 150+ user beta testing
- Lead a cross-functional team of 7 individuals to oversee and grow brand presence & develop full stack consumer app
- Scaled Instagram reaches from 0 to 250k+ views and 500+ followers in 6 months through strategic content planning and marketing campaigns ahead of app launch

Plymouth District Library

Plymouth, MI

Software Engineering Intern

Aug 2023 – Aug 2024

- Created a Problem Bank website, leveraging JavaScript to store data on Microsoft Excel, which streamlined the process for users to access and solve programming problems, resulting in improved user engagement and satisfaction.
- Managed lab equipment, including 3D printers, while assisting patrons with software such as Fusion 360.
- Contributed to the successful execution of library programs for the lab, enhancing community engagement.

PROJECTS

Hand Gesture Race Car Game | GitHub | PixiJS, Google MediaPipe, Express.js | Hack Dearborn 3

- Programmed a race car simulation with gesture-based control via webcam, demonstrating skills in sensor data processing and real-time control relevant to embedded systems and automation.
- Achieved over 90% accuracy in hand gesture recognition using Google MediaPipe, optimizing data handling for responsive, low-latency control suitable for hardware applications.

Engineering Capstone Project | GitHub | C++, AutoCAD, Computer Vision, Arduino

- Developed an automated snowplow model capable of navigating a 3ft x 3ft area by programming and wiring an Arduino and designing a 3D-printed chassis.
- Detected April Tags with an 85% detection rate during optimal runs using a Raspberry Pi and camera.

3D Math Rendering Software | <u>GitHub</u> | *C++*, *SFML*

- Created a 3D rendering tool using SFML to visualize complex mathematical functions, handling up to 9 billion points
- Implemented dynamic camera controls using linear transformations to enhance data visualization and interactivity

Missile Pathfinding Simulation | GitHub | C++, SFML

- Programmed a missile pathfinding simulation using ray marching and pursuit curve algorithms
- Incorporated an efficient hit detection system with O(nh) time complexity using the Jarvis March method

SKILLS & ASSETS

Programming Languages: C/C++, Python, JavaScript, Java, MATLAB, HTML5/CSS3, VBA

Technical Skills: Digital Circuit Design, Design Release Engineering, Systems Engineering, ROS2, Git/GitHub, Raspberry Pi, Arduino, Combinatorial Logic, Memory and Data Storage Systems, AutoCAD, Catia, Microsoft Excel