

Alexander J. Lopez

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SUMMARY

Software engineering student at the Milwaukee School of Engineering looking to grow my skills with hands on industry experience. My interests are software engineering, automation, web development, robotics, and cyber security.

EDUCATION

Milwaukee School of Engineering
BS, Software Engineering, GPA: 3.58

2022 – Expected 2026
Milwaukee, WI

Wausau East Highschool
International Baccalaureate Diploma

2018-2022
Wausau, WI

WORK EXPERIENCE

L & S Electric, INC.
Software Engineer Intern

May 2023 - Present
Rothschild, WI

- Developed a full stack enterprise application that is going into deployment internationally.
- Had full control over the development of the product from concept to delivery.
- Worked with a team of three including myself, another software engineer, and a user experience consultant.
- Independently designed and implemented a standalone software architecture in .Net 7 Maui.
- Implemented multithreading and complex data structures to improve the performance of the application.

Self Employed
Software Consultant

June 2018 - 2021
Schofield, WI

- Worked with L & S Electric, INC. as an independent contractor to build several software applications.
- My projects ranged from VR tours of the company's traction motor refurbishment plant to virtual showcases for products and project sites.

Aqua Finance, INC.
Debt Collections Dialer 2

July 2020 - January 2022
Schofield, WI

- I worked as a debt collections dialer calling customers who were past due on their loan payments.
- I frequently rose to the top three performing employees in my department by employing new collections tactics.
- I assisted in the training of new employees.

PROJECTS

Personal Door Assistant for my Dorm Room

- Developed a machine that allows me to unlock my door from a web interface via the internet.
- The machine uses an ESP32 microcontroller to manage commands from the web server and open the door with a spool attached to a stepper motor.

PLY Sequence File format for Volumetric Video storage

- PLY Sequence is a new file format that holds point cloud videos for the purpose of volumetric video storage.
- This will allow us to record 3-dimensional footage for applications ranging from metaverse presentations, virtual reality tutorials, and telepresence.
- Co-Developed programs to convert PLY files into PLYS files as well as read and render PLYS files in Unity.

Personal CV Website

- I built a website to host information about my personal projects as I improve my skills.
- The website can be found at: <https://alex-j-lopez.github.io>
- The project uses HTML, CSS, and JavaScript

House roaming Lego Robot

- Created a custom object detection and avoidance program that allowed the robot to roam my house indefinitely.

VR Photogrammetry Scan Viewer

- VR application built in Unity that allows me to view 3d scans I created from photogrammetry.

SKILLS

- C# .Net, Java, HTML, CSS, C++, JavaScript, .Net Maui, Responsive Web Design, Unity, Ansys Fluent, Fusion 360/CAD, and the Microsoft Mixed Reality API.