DANIEL OSEI

MECHATRONICS ENGINEER

CONTACT

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Grand Rapids, MI

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SKILLS

- SolidWorks
- Python
- Sensors
- Actuators
- PLCs
- Embedded Systems
- Microcontrollers
- MATLAB
- Wiring Diagrams
- Troubleshooting

EDUCATION

Bachelor of Science

05/2022

Michigan Technological University

Houghton, MI

Mechatronics

CERTIFICATES

Certified SolidWorks Professional (CSWP)

03/2023

Dassault Systemes

SUMMARY

Mechatronics Engineer with 4 years designing and debugging automated equipment for medical device and furniture plants in West Michigan. Combines SolidWorks design, sensor and actuator selection, PLC logic and embedded systems firmware, and supports machines from first prototype to production. Brings strong troubleshooting across mechanical, electrical and software faults.

EXPERIENCE

Mechatronics Engineer

06/2024 - Present

Lakeshore Automation Works — Grand Rapids, MI

Custom automation builder for medical device and office furniture manufacturers.

- Design **9** automated assembly stations in SolidWorks, from frames and fixtures to sensor and actuator mounts.
- Select servo motors, pneumatic actuators and sensors, and draw wiring diagrams in AutoCAD Electrical for 14 panels.
- Program PLCs and HMIs for station sequencing, bringing new lines to 98% uptime within 6 weeks of launch.
- Lead troubleshooting on 3 production lines, cutting unplanned downtime by 35% in 2025.

Associate Mechatronics Engineer

07/2022 - 05/2024

Riverbend Medical Devices — Wyoming, MI

Manufacturer of infusion pumps and patient monitoring equipment.

- Wrote embedded C firmware on ARM microcontrollers for 4 end-of-line testers that check 1,200 pumps a day.
- Built MATLAB and Python scripts to analyze test data, catching a sensor drift issue that saved $120,000 in scrap.
- Created 30 drawing packages and bills of materials in SolidWorks for fixtures and machine guards.
- Supported design transfer of 2 new pump models with quality and manufacturing engineers.

Engineering Co-op

05/2021 - 08/2021

Keweenaw Controls — Houghton, MI

Controls and automation integrator for mining and paper mills.

- Wired and tested 6 control panels from schematics under a senior controls engineer.
- Wrote ladder logic for a conveyor sort station that handled 40 cases a minute.
- Measured and documented 25 sensor and actuator replacements for the plant maintenance team.