

LOUIS BERSINE

Controls & OT EXPERT



Objective

Highly motivated individual with a decade of experience working in both OEM design environments and as the on-site controls engineer. Additional experience includes OT administration, web development and software development. My vast skillset and listening strategies will make me a strong asset to your team. Check out <https://louisbersine.com> for demo projects with AI and more info.

Education

Michigan Technological University
BSEE | Electrical Engineering
Class of 2015



**Michigan
Technological
University**

Skillset

CONTROLS ENGINEERING	OT ADMINISTRATION	PROGRAMMING
AutoCAD	Studio 5000	TCP/IP
RSLogix 500	FTView ME	PTP
FTView SE	FT Assetcentre	Claroty
Osoft PI	Ignition	SMNTP
Kepware	Fanuc	EIP
IAI Robots	Denso Robots	VPNs
Kinnetix	Powerflex	FW
Keyence Vision	Cognex Vision	AD
Atlas Copco	Siemens S7	

Freelance

Client Dennison University Ohio

AUGMENTED PERFORMANCE	Developed fully autonomous virtual reality system to mirror real time theatrical performance in VR.
AI PERFORMANCE	Designed AI generated theatrical performance to re-create 24/7 live performance of theatrical performance in VR. Dialog changes each performance by LLM model.

Experience

KELLANOVA | KELLOGG
Dec 2023 - Present
28th St SE
Grand Rapids, MI 49548

Managed controls infrastructure on OT Network. Designed and executed equipment upgrades and installs during plant downtime.

PROFICIENT MACHINE & AUTOMATION
Sep 2019 – Sep 2023
8074 Clyde Park Ave SW
Byron Center, MI 49315

Designed AutoCAD Electrical drawings, programmed equipment, and commissioned installations at customer facilities.

ROMAN MANUFACTURING
Aug 2018 – Sep 2019
861 47th St SW
Wyoming MI 49509

Managed execution and procurement of customer build requests. Provided on-site support and executed upgrades at Metal Refinery.

ALTRON AUTOMATION
Dec 2016 – Aug 2018
3523 Highland Dr
Hudsonville, MI 49426

Designed AutoCAD Electrical schematics, programmed equipment, and commissioned installations at customer facilities.

Projects

Kellanova/ Kellogg	PTP MASTER CLOCK RECOVERY	<p>Problem: Line was down due to three pieces of equipment presenting position failures commonly seen in mechanical failures.</p> <p>Solution: Utilized system I set up in Asset Centre to trace clock being reset at 2am 3rd shift, guiding me to a PLC sending PTP messages over the OT Network becoming the grandmaster. Completed in under a single shift.</p> <p>Benefit: Prevented additional downtime and setup preventative measures to block PTP across the OT Network.</p>
	OT SYSTEM OVERHAUL	<p>Problem: Several systems for data collection were not functioning upon starting my role. No documentation existed.</p> <p>Solution: Restored functionality for OPC communication on several servers, created disaster recovery program, engineered solution to track PLC changes, developed automated backup system and created documentation.</p> <p>Benefit: Plant wide productivity improvements, reduced maintenance time, and restored metrics that were no longer being tracked.</p>
	STANDARDIZED ROCKWELL VMs	<p>Problem: Line 7 cutter e-stop was single-channel, allowing undetectable failure and catastrophic injury risk.</p> <p>Solution: Designed a Guard Link intelligent safety system upgrade using existing devices and improved fault diagnostics.</p> <p>Benefit: Avoided a project quoted at \$200,000 by contractors and executed it internally for ~\$30,000 saving \$170,000.</p>
Proficient Machine & Automation	TOUCH PANEL TEST STATION	Designed electrical schematics and programming for system that interfaced with customer touch screen panels for electric vehicles and verified functionality.
	INTERIOR PANEL SONIC WELDING	Designed electrical schematics and programmed automated system that welds interior panel components together using sonic welding.
	GLOVEBOX LATCH FULLY AUTONOMOUS	Took ownership of glovebox latch rotary system that ran autonomously. Worked with customers on site to re-program system and find mechanical flaws to ensure customer met metrics promised for system.
Roman Manufacturing	METAL REFINERY EQUIPMENT	Worked with metal refinery to modernize systems to meet machinery safety standards and collect metrics.
	CLIENT DESIGN EXECUTION	Directly worked with clients to manage requirements for building and testing welding equipment designs.
Altron Automation	ROBOTIC AUTONOMOUS PUSHNUT CELL	Designed, programmed and commissioned robotic cell on automotive seat assembly line.
	INTERIOR MOLDING SEMI TRUCKS	Designed and programmed large molding press that assembled interior of semi-trucks.
	AUTONOMOUS SEAT ASSEMBLY STATION	Designed, programmed and ran FAT for autonomous screw station that assembled semi-seat frames autonomously.