

# JORGE REYES

Get in touch: **Phone:** 269-419-4762, **Email:** [reyesjorge76@hotmail.com](mailto:reyesjorge76@hotmail.com)

**LinkedIn Profile:** <https://www.linkedin.com/in/reyesjorge76-driven/>

## PROFESSIONAL SUMMARY

Innovative Systems Engineer with over 14 years of hands-on experience maintaining, designing, building, and commissioning fully automated systems in high-tech manufacturing environments. Proven leadership in process optimization, systems controls, and cross-functional collaboration, with a strong track record of implementing standardized automation solutions that enhance production efficiency and ensure regulatory compliance. Expert in pneumatic and hydraulic system integration, electrical wiring, component assembly, equipment maintenance, and continuous improvement strategies and system repair, with deep proficiency in Allen-Bradley, Siemens, Mitsubishi, and Omron PLC platforms amongst others. Skilled in HMI and SCADA development. Experienced in Factory and Site Acceptance Testing (FAT/SAT), Currently expanding capabilities in software engineering, web development, artificial intelligence (AI), and machine learning (ML) to bridge intelligent automation with data-driven decision-making.

### ◆ Key Accomplishments

- Increased production efficiency by 15%, reduced equipment design cost by 25%, lowered defect rates by 10%, and improved testing accuracy through automation of complex test systems.
- Implemented preventive maintenance programs that reduced unscheduled downtime by 20%, and applied predictive strategies to cut downtime by an additional 15%

### ◆ Technical Skills

- **Automation & PLC Programming:** Allen-Bradley, Siemens, Mitsubishi, Omron
- **Control Systems & Robotics:** Robotics troubleshooting, hydraulic/pneumatic integration, battery manufacturing systems, system diagnostics
- **Testing & Validation:** FAT, SAT, compliance audits, fault isolation, strategy implementation, continuous improvement
- **Electrical & Mechanical Assembly:** Electrical wiring, component assembly, system repair
- **HMI & SCADA Development:** Siemens WinCC, RSView, FactoryTalk, Ignition
- **Project & Vendor Management:** Risk assessment, budget planning, vendor coordination, regulatory compliance
- **Emerging Technologies:** Software development, AI, ML, intelligent automation

## EDUCATION

### Kellogg Community College

Associate in Applied Science (AA), Industrial Electricity and Electronics

Associate in Applied Science (AA), Industrial Skilled Trades

## CERTIFICATIONS & TRAINING

- University of Michigan, Michigan Engineering. Applied Generative AI Specialization Certificate.
- Central Michigan University, Simply Learn. Software Engineering Certificate.
- National Fire Protection Association, Standard for Electrical Safety. 70E Certificate.
- OSHA Education Center, Safety & Compliance Training. OSHA 10 Certificate.

## **Work Experience**

**General Motors Technical Center Warren, USA 07/2021 – 01/2025**

### **Lead Systems Controls Engineer**

- Led controls automation or battery projects that increased production efficiency by 15% and reduced defect rates by 10% and improved cycle times by 20%.
- Ensured compliance with ISO, OSHA and NFPA safety standards across all engineering tasks.
- Managed vendor coordination, review estimates/quotes while ensuring seamless design and integration of PLC-controlled systems with robotic automation.
- Executed Factory Acceptance Testing (FAT) & Site Acceptance Testing (SAT) with the goal of achieving 99.9% operational reliability.

**FCA (Stellantis) Detroit, USA 01/2020 – 07/2021**

### **Controls & Robotics Professional Maintenance Specialist**

- Optimized robotic sorting and conveyor systems, reducing downtime by 30% through predictive maintenance Continuous improvements and calibration strategies, enhancing production efficiency and equipment lifespan.
- Ensured all Standard Maintenance Procedures (SMPs) aligned with industry KPIs for maximum performance and Implemented vacation planning for maintenance scheduling, improving resource utilization by 10%.

**Delphi Technologies Troy, USA 05/2016 – 12/2020**

### **Lead Maintenance Engineer | Validation Test Development Engineer**

- Automated complex test systems for Diesel automotive engine controllers, improving testing accuracy by 35% while providing technical coaching to maintenance teams, ensuring 24/7 production support.
- Implemented a preventive maintenance (PM) program, reducing unscheduled downtime by 20% and Managed critical path timing issues to ensure on-time delivery of high-value engineering projects.
- Designed and maintained hydraulic test stands and pneumatic fixtures for diesel engine controller validation, ensuring consistent pressure regulation and safety compliance.

**Denso Manufacturing Battle Creek, USA 08/2015 – 04/2016**

### **Journeyman Electrician**

- Maintained and calibrated electrical & mechanical instrumentation, ensuring optimal system performance.
- Documented test equipment validation reports, supporting regulatory compliance audits.

**PRAB Kalamazoo, USA 05/2014 – 08/2015**

### **Global Service Engineer**

- Led multi-million-dollar conveyor equipment installations, ensuring adherence to commissioning protocols & safety standards.
- Fabricated specialized fixtures, enhancing machine performance & reliability.
- Installed, commissioned and diagnosed hydraulic and pneumatic systems control loops and actuators for industrial scrap conveyors and fluid filtration equipment.
- Diagnosed hydraulic actuator faults and optimized pneumatic control loops for improved system responsiveness.