Adam Young

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EDUCATION

University of Cincinnati**,** BS Mechanical Engineering, Cincinnati, OH (2019)

TECHNICAL SKILLS

Hardware: Beckhoff PLC, B&R PLC/Drives, Fanuc Drives, Yaskawa Drives, ABB Drives
Communication Protocols: OPC-UA, Powerlink, Profinet, EtherCAT, Modbus,
Software: MapleSim, Maple, TeamCenter, NX, StarCCM+, ANSYS, NASTRAN, SolidWorks
Technologies: ASP.NET Core, React, Express, Node, Postgres, SQLite
Computer Languages: C#, SQL, HTML, CSS, Javascript, Structured Text, SFC, C, Java, Python, VB, MATLAB

WORK EXPERIENCE

Milacron in Batavia, OH
R&D - Control Systems Architecture Engineer May 2024 – Present

- Designed system architecture for communication of PLC data to a human machine interface (HMI) and SQLite database utilizing OPC-UA protocol.
- Ported current control platform's interface (HMI) to a full stack web application using .NET and Blazor.
- Implemented an improved injection velocity control loop, improving load sensitivity from 3% to less than 1%.
- Wrote architecture documentation for PLC and full stack web application.
- Traveled to NPE Plastics Show Exposition and assisted with order completion by explaining control features to customers with result of $300k in sales.

Controls Software Engineer Nov 2021 – May 2024

- Developed 10+ control features/visualizations per customer requirements.
- Created Digital Twin models using MapleSim for 2 machine lines to improve new product development efficiency by 10%. Implemented simulation models into machine logic for accurate machine simulation, improving software development efficiency by 20%.
- Resolved software bugs during production, resulting in a 95% on-time delivery KPI.

Product Validation Specialist July 2019 – Nov 2021

- Wrote testing documentation and reports for 5 machine lines in compliance with ANSI Standard B151.
- Tuned machines to meet engineering specifications by conducting hydraulic, electrical, mechanical, and software validation. Conducted on-site diagnostics/troubleshooting at customer locations to identify and resolve machine issues. Collaborated with the internal software team to analyze and address software-related malfunctions.

PCC Aerostructures in Bothell, WA Jan 2018 – Aug 2018
Continuous Improvement Co-Op

- Analyzed CNC programs to ensure consistent structuring, designed holding structure for 200 lb parts, developed tool inventory system using Microsoft Access, and worked with suppliers on better organization of orders/deliveries to improve warehouse efficiency.

TECT Power in Utica, NY May 2017 – Aug 2017
Engineering Co-Op

- Analyzed measurement data using VBA to determine optimal time to change cutting tools, created drawings for 15 cutting tools using NX, wrote standard operating procedures for CNC machinists, and analyzed machine downtime for process improvement.

Siemens PLM Software in Milford, OH Jan 2016 – Dec 2016
Pro*duct Validation Co-Op*

- Created and executed scripts for new functionality implemented into Active Workspace, executed test cases for current functionality in NX, TeamCenter, and Active Workspace, created automated test scripts using the Cucumber/Selenium framework, and executed server-side calls to index structures using Apache Solr.