

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: Powerlink, Profinet, EtherCAT, Modbus, OPC-UA

Software: MapleSim, Maple, TeamCenter, NX, StarCCM+, ANSYS, NASTRAN, MATLAB, SolidWorks

Technologies: .NET Core, React, Express, Node, Postgres, SQLite

Computer Languages: C#, HTML, CSS, Javascript, Structured Text, SFC, C, Java, Python, HTML, Javascript, VB/VBA, MATLAB

WORK EXPERIENCE

Milacron in Batavia, OH

Control Systems Architecture Engineer

May 2024 – Present

- Designed system architecture for communication of PLC data to a machine interface (HMI) and SQLite database.
- 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, resulting in \$1.5 million 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 200lb 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

Product 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.