

Christopher VanOosterhout

vanooster.c@gmail.com | (616) 834-2570 | portfolio: www.vanoostc.com

Professional Summary:

Robotics and Automation Engineer with a background in leading the development of automated systems, robotic integrations, and continuous improvement initiatives. Experienced in software development, 2D/3D sensing, point cloud processing, and industrial I/O systems, delivering reliable, data-driven solutions.

Work Related Experience:

Worked extensively with Staubli robots in aseptic, surgical, general industries and food environments
Developed a C++ constrained FABRIK kinematic solver for a 7-axis collaborative kuka IIWA
Automation leveraging 2D and 3D sensors including magnetic, vision, and lidar
C++ application development with extensive use of threading and socket communication
Implement AsyriI feeders and create Cognex jobs for new and retrofit applications
Experience with Profinet, Profibus, Ethernet/Ip, and EtherCat communication protocols
Project development with Allen Bradley and Beckoff PLCs

Employment:

Automation Manager
Flex LTD, Columbia, South Carolina 2025-Present

Lead cross-discipline teams on production and continuous improvement initiatives
Review and approval of medical device documentation in compliance with ISO 13485
Lead automation solutions between multiple PLCs, Cognex cameras, AsyriI feeders and Robots
Manage retrofit projects to target low performing subsystems and update schematics
Oversee preventative maintenance schedules to maximize system uptime and reliability
Develop applications using Allen-Bradley Studio 5000 and FactoryTalk View
Modified existing manufacturing lines with Magna Motion systems to support new layouts

Advanced Engineering
Staubli Robotics, Duncan, South Carolina 2021-2025

Manage and support several robot application and software project concurrently
Develop automation solution that required network communication between multiple robots
Troubleshooting and development in existing code to meet customer's needs
Communication using ProfiNet, Ethernet/IP, Profibus, Modbus EtherCat and TCP/IP

Software Engineer
Link Engineering, Ottawa Lake, Michigan 2019-2021

Tasked with designing and implement a new application to expand product line
SQLite data management for several control channels up to 4000Hz
Utilized C++, C#, MFC, Winforms, CLR, SQLite, factory pattern, and protobuf

Software/Robotics Engineering
Capstone Surgical Technologies, Troy, Michigan 2018-2019

3D rendering to real world robot path generation for autonomous spinal surgery
Implemented real-time Kuka IIWA's FRI for dynamic pathing using Java and C++
Utilized C++, Java, multiprocessing communication and Winform

Software Engineering Intern
JR Automation, Holland, Michigan 2016-2018

Worked within the advanced applications group
Developed and implemented real time data acquisition applications
Utilized 3D sensors, Kuka and Fanuc robots, Beckoff PLC, C#, and WPF

Continued Educational Activities:

Devdept 3D and basic Unity3D application development
Platform ball balance: one solution using resistive touch screen another using vision
Algorithm development for path generation from cad models using 3D feature extraction

Education:

Grand Valley State University: GPA 3.8 2018
Bachelor of Science in Engineering Computer Engineering

You can visit my LinkedIn at: <https://www.linkedin.com/in/chris-vano-3b54b4126/> and portfolio at: www.vanoostc.com