Christopher VanOosterhout

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Professional Summary:

As an Automation Manager with an emphasis on Robotics and Software Engineering, I lead the development of advanced automation systems, robotic and hardware integrations, and continuous improvement projects alongside a team of talented engineers. I am passionate about leveraging software, 2D/3D sensor technologies, point clouds, and I/O devices to build 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 Asyril feeders and alter 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 continuous improvement initiatives
- Develop automation solutions between multiple PLCs, Cognex cameras, Asyril feeders and Staubli Robots
- Manage retrofit projects to target low performing subsystems and alter electrical schematics
- Oversee preventative maintenance schedules to maximize system uptime and reliability
- Development within Studio 5000 and FactoryTalk View

Automation And Algorithm Engineer, Freelance
RTW Automation, Columbia, South Carolina 2023-Present
- Develop software solutions to simplify automation challenges
- Field device integration and creating software modules as a toolbox

Advanced Engineer
Staubli Robotics, Duncan, South Carolina 2021-2025
- Manage and support several robot application and software project concurrently
- Develop 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 Engineer
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, multiprocess communication over LAN, and Winform

Software Engineer 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
Easy robot path generation algorithm for

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