

Christopher VanOosterhout

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Professional Summary:

As a Robotics/Software engineer I am constantly pursuing my passion of automating systems and learning new technologies. Experienced with industrial and collaborative robotics, PLC, 2D/3D sensors, point cloud manipulation, and io devices for developing dynamic system responses.

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
Metal mold location and orientation tracking development using structured light and a Fanuc robot
C++ application development with extensive use of threading and socket communication
Experience with Profinet, Profibus, Ethernet/Ip, and EtherCat communication protocols
Project development with Allen Bradley and Beckoff PLCs

Employment:

Automation And Algorithm Engineer

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

Advanced Engineering

Staubli Robotics, Duncan, South Carolina 2021-Present
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

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 over LAN, 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

Volunteering/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