Darien Ford

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Experience

Kawasaki Robotics Wixom, Michigan
Application Engineer 09/2023 - 01/2024

- Developed a palletizing software package for 4 and 6-axis Kawasaki Robots using the AS programming language and implemented it on-site at multiple customers.
- Created robot programs for customer trade show booths that showcased the capabilities of their automation cells.
- Conducted reach studies, speed tests, and cycle-time analysis in simulated and real-world environments.
- Performed software and hardware testing of new robots and created test cells and specialized tooling needed for tests.
- Consulted with systems integrators and end-users to develop robotic automation solutions, conducted on-site training on robot programming, and provided remote technical support concerning robot I/O and robot-PLC communication.

Field Service Engineer 04/2023 - 09/2023

- Supported customers on-site and remotely by diagnosing and resolving mechanical, electrical, and software complications related to robot functionality.
- Collaborated with the service team and engineering department to develop robotic automation solutions for systems integrators and end-users that improve customer retention and satisfaction.

Woco Tech USA Novi, Michigan
Design Engineer Intern 06/2019 - 08/2021

- Created design proposals and updated existing designs to meet customers' specifications.
- Produced technical drawings and presentations for customers.
- Reviewed and revised designs for tooling and manufacturing feasibility.

Engineering Intern 05/2017 - 08/2017

- Ensured that automotive parts were made to specification through tolerance testing.
- Responsible for quality review and inspection of both production and prototype parts while adhering to strict time constraints and standards.

Projects

Mobile Train Handling Simulator 09/2022 - 12/2022

- Led a team of six students in Michigan State University's computer science capstone course to design and build a mobile train handling simulator following the Agile methodology for the Union Pacific Railroad Company.
- Created for a Microsoft Surface Tablet and implemented with C# using the Unity game engine, Microsoft's .NET framework on Windows, and a proprietary train-physics engine created by PS Technology.

Portfolio Website 08/2024 - Present

- Created a portfolio/resume website using the React framework and Vite (HTML, CSS, JavaScript).
- Set up auto-deployment to Hostinger from a repository using GitHub actions.

Education

Michigan State University East Lansing, Michigan
Bachelor of Science, Computer Science; Minor in Business 08/2017 - 12/2022

Skills

- Python, C++, C, C#, SQL, AS, Lua, Unity 2D, Git, GitHub
- Software Development, Data Structures and Algorithm Engineering, Object-Oriented Programming
- Robot Programming, Robot I/O, Robot-PLC Communication, Electrical Troubleshooting
- CATIA v5, NX, SolidWorks, AutoCAD, Inventor