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Experience

JR Automation, Mechanical Engineering Intern

May 2023 - Aug 2023, May 2024 - Current

- Designed parts for projects assigned to me
- Worked on 2 separate teams of interns to design, draw, purchase, and build a mobile test station and automate a popcorn machine
- Set up meetings with client over Intern Project and interns to keep up progress updates and direction
- · Performed mechanical design debugging for a machine being built, altered parts, added sensors and mounts
- Fixed and redesigned a belt driven system to properly use pre-sized belts

Amazon/C&W Services, Maintenance Tech 1

West Jordan, Utah

July 2020 - Dec 2020

- · Completed daily Preventative Maintenance tasks to ensure machine safety and reliability
- Performed duties and tasks requiring installing of equipment and systems to assist Amazon Employees
- Used machine tools daily and changed conveyor belts

White Knight Fluid Handling, Panel Builder

Kamas, Utah

Ogden, Utah

Dec 2020 - May 2021

- · Built high power and low power panels to engineer designs and specifications
- · Wired Panes into cabinets and performed quality checks

Education

Utah State University

Technology Systems Emphasis in

Robotics

2022 - Current

- Learned Arduino Micro Controllers
- Designed a project and project proposal for automated watering of potted plants
- · Technical Communication
- Multi-Variable Calculus

Utah Valley University

AAS Automation Electrical

Technology

2018-20

- Received Associates in Applied Sciences
- Motor Controls: Electrical wiring, Motor Relays, and Variable Frequency Drives
- PLC Programming in Studio 9000
- HMI Programming in Factory Talk
- Basic Electronics

Personal Study

2024 - Current

Currently studying and learning C++. I am studying from C++ Primer

Notable Courses: Multi-Variable Calculus | Management of Organizations and People | Advanced Physics | 3 Dimensional Modeling | Industrial Hydraulics and Pneumatics | Motor Controls

Skills

Programming PLC Ladder Logic, C

Software Linux(Debian-based), SolidWorks, AutoCAD, Studio 5000, Visual Studio Code

Mechanical Panel Building, Machine Tools, Pneumatic Systems, Problem Solving, Mechanical Drawings

Projects

Home Automation May 2023 - Current

Personal Project

- Created a server to run program to connect smart devices to centrally
- Designing sensors using WiFi enabled Micro-controllers to detect temperature, humidity, motion, etc

Home Improvements

Personal Projects

- 3D model and print small things to fix minor problems in apartment and home
- Building aforementioned automatic plant watering device with Arduino and Soil sensor

Automation Electrical Technology (AET)

Utah Valley University

Jan 2020 - Apr 2020

Senior Project

SMC Automated Assembly Line

Rewired 3 of the stations to include Compact Logix controllers to match the rest

- Programmed 8 of 9 PLCs in Studio 9000
- Programmed an HMI on Factory Talk to for a User to see what was happening. Included each station and Start/Stop and Auto/Man buttons to control the machine.
- Included pneumatic, hydraulics, and a 4 axis Fanuc Robot