

Matthew Clark

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Experience

JR Automation, Mechanical Engineering Intern

Ogden, Utah

May 2023 - Aug 2023, May 2024 - Dec 2024

- 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

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

Bridgerland Technical College

Controls Engineering Certification

Feb 2024 - May 2025

- Programmed Compact Logix with Studio 5000 Logix Designer on actual machines
- Learned in-depth and hands on with safety relays and safety I/O. Used Proportional Integral Derivative control methods for programming a system.
- Interfaced with vision systems and servo motors and drives
- HMI Programming
- FANUC basic programming, FANUC Simulation, and Robot safety,

Utah State University

Technology Systems Emphasis in Robotics

2022 - May 2025

- Learned Arduino Micro Controllers
- Designed and completed a project and for automated watering of potted plants
- Technical Communication

Utah Valley University

AAS Automation Electrical Technology

2018-20

- Motor Controls: Electrical wiring, Motor Relays, and Variable Frequency Drives
- HMI Programming in Factory Talk
- Basic Electronics

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 Improvements

May 2023 - Current

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

Senior Project

Jan 2020 - Apr 2020

- 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