

Dominic Castaneda

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Education

Oakland University | Oakland County, MI | Junior

Expected Graduation: May 2027

Bachelor of Science in Mechatronics and Robotics Engineering | Minor in Computer Science

M-TEC | Controls Technician

April - Aug 2024

- **Relevant Coursework:** Advanced Technology Readiness, OSHA 10-Safety Training, Electric Vehicles Fundamentals and Safety, Trade Fundamentals, Electrical Fundamentals, Motor Controls and Drives, Digital Electronics, Electronic Sensors, Fluid Power Fundamentals, FANUC Robotics Operations, Basic PLC, Intermediate PLC-1, Intermediate PLC-2, Advanced PLC Maintenance and Troubleshooting, Allen Bradley HMI Programming, VFD Programming and Troubleshooting-VFD Power Flex, RFID-Radio Frequency Identification

Work Experience

Loccino Italian Grill & Bar | *Waiter* | Troy, MI | Feb 2024 – Current

- **Mastered time management** by coordinating the flow of multi-course meals across several tables.
- **Communicate effectively** with guests and team to ensure accurate, timely service and smooth operations.

Little Caesars | *Assistant Manager* | Shelby, MI | Sept 2020 – Sept 2021

- **Led nightly operations** by managing team members, end-of-day cash counts, and securely closing the store.
- **Oversaw inventory and staffing** by assigning tasks, training new hires, and maintaining stock.

Projects

Weather App

React Native | Supabase | OpenWeather API

- Built a cross-platform weather app featuring real-time updates, 10-day forecasts, and persistent saved cities.
- Implemented auto-refresh logic, cloud database integration, and live search functionality using secure APIs.

Automatic Card Shuffler

Arduino Uno | C++ | Fusion 360 CAD

- Designed and built an automatic card shuffler using an Arduino-controlled dual-motor system and custom 3D-printed housing.
- Engineered mechanical ramps, IR remote control, and electronic timing for smooth card delivery.

Toy Claw Machine with PLC Control

Allen Bradley PLC | RsLogix 5000

- Programmed manual and automated pick-and-place operations for a retrofitted toy claw machine using ladder logic.
- Integrated limit switches, motor control, and solenoid actuation to simulate industrial robotic behavior.

Casino Simulation Game (Prototype)

Unity | C# | 3D Game Development

- Developed a 3D multiplayer casino environment in Unity, featuring player movement, slot machine logic, and interactive blackjack tables.
- Focused on modular prefab design, scalable architecture, and planning for future online multiplayer.

Personal Portfolio Website

HTML | CSS | JavaScript

- Designed a clean, mobile-responsive portfolio site showcasing projects with a filtering system and live GitHub/project links.
- Emphasized fast load times, intuitive UX design, and professional presentation.

Technical Skills

- **Programming:** HTML, CSS, JavaScript, JSX, C++, Arduino, Ladder Logic
- **Development Tools:** VS Code, Visual Studio, Git, GitHub Desktop, Unity, Fusion 360
- **Systems & Platforms:** Windows, Linux, macOS, Virtual Machines, Microsoft Word, Excel, PowerPoint, Visio, Teams
- **Industrial & Automation:** RsLogix 5000, Studio 5000, FactoryTalk, Allen Bradley, Siemens, VFDs, HMI

Certifications

- **Controls Technician** | Aug 2024
- **SACA Certified Ethernet Communications 1** | July 2024 | Cert No. KX3S8D
- **SACA Certified Variable Frequency Drive Systems 1** | July 2024 | Cert No. 6VPD5J
- **SACA Certified Pneumatic Systems 1** | June 2024 | Cert No. J5H3S9
- **SACA Certified Programmable Controller Troubleshooting 1** | Aug 2024 | Cert No. F2DT56