

# 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.

## 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

## Interpersonal Skills

- **Motivated Learner** - Continuously pursues new technical skills, certifications, and hands-on project experience.
- **Team Player** - Works effectively in team environments, coordinating across technical and non-technical groups.
- **Problem Solver** - Skilled at troubleshooting mechanical, electrical, and software systems under real-world conditions.

## 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