Daniella Donn

914-413-3898
danielladonn@gmail.com
www.linkedin.com/in/DaniellaDonn

Education

B.Sc. Mechanical Engineering Technology | Rochester Institute of Technology — Aug. 2018 - May 2023
GPA: 3.09/4.00 | **Concentrations:** Manufacturing & Automation

Skills & Certifications

Mechanical Design & Drafting: SolidWorks, Creo, Fusion 360, GD&T, Engineering Drawings, 3D Printing
Programming: Python, Excel VBA, PLC Programming, COGNEX, Ignition Automation, Power Automate
Robotics: RoboGuide, Robostudio, UR Robot
Engineering: Automation Studio, EES, Studio 5000, Quartus Prime
Certifications: FANUC CERT HandlingTool Operations and Programming, SIX SIGMA GREEN BELT

Work Experience

Manufacturing Engineer | Nuvera Fuel Cells — Nov. 2023 - Jan. 2025

- Optimized manufacturing automation for Hydrogen Fuel Cell Engines.
- Designed and 3D-printed UR Robot pick-heads using SolidWorks.
- Programmed UR Robot for pick-and-place tasks using vision systems, sensors, and custom fixtures.
- Generated engineering drawing with GD&T for all 3D Models.
- Programmed COGNEX vision systems for precision edge detection and placement.
- Developed an interactive Ignition Automation dashboard for machine tracking and morning meetings.
- Built a Power Automate based trouble ticket system for machine maintenance alerts.
- Created a Value Stream Map (VSM) for a new manufacturing process to optimize efficiency and workflow.

Manufacturing Engineering Co-op | Jabil — Jul. 2022 - Jan. 2023

- Automated and optimized prosthetics manufacturing processes.
- Designed part-tracking trays using Creo.
- Developed an Excel VBA-based machine location map.
- Programmed a Raspberry Pi S.O.S. system for maintenance alerts.
- Improved G-code probing for enhanced tolerance checks.
- Built a computer vision system with a convolutional neural network (CNN) model to detect unbuffed tabs.

Projects

VSM for OS2 Process — Oct. 2024 - Jan. 2025

- Developed a Value Stream Map (VSM) for Nuvera's OS2 process by analyzing each step, collecting process data, and collaborating with operators to identify areas for improvement.

UR Robot Pick and Place — Jun. 2024 - Oct. 2024

- Automated UR robot for rivet pick and place and heat staking, reducing cycle time from 2 minutes to 10 seconds.
- Calibrated a COGNEX 7802 camera for real-time rivet coordinate detection.
- Designed a custom SolidWorks pick-head for 2mm rivets with an interchangeable heat staking attachment.

UR Robot Pick-Heads and Fixtures — Dec. 2023 - Oct. 2024

- Designed and modeled grippers for UR robots using SolidWorks.
- Developed a 200+ rivet capacity tray with a secure yet removable fixture.
- Created detailed engineering drawings with GD&T for all components.

COGNEX Vision setup for Over Rotated Platform — May 2024 - Jun. 2024

- Programmed a COGNEX 7802 camera to detect machine platform over-rotation, calculating the angle and displacement from the original position. This data was then sent to a UR Robot for precise item retrieval.

Tab Detection — Jul. 2022 - Jan. 2023

- Developed a computer vision system on a Raspberry Pi using Python and a convolutional neural network (CNN) model to detect unbuffed tabs on machined parts.
- Trained the model with labeled images to improve detection accuracy.
- Utilized OpenCV, NumPy, and Matplotlib for image processing and analysis.