

DANIEL A. DIAZ

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EXPERIENCES:

Manufacturing Engineer 3

5/2022 to Present

Haas Automation, Oxnard, CA

- Implemented \$375K Automated Hose Feeder equipment, mitigating facility risk, and integrating with SAP (ERP).
 - Utilized VBA to optimize BOMs and update routings for 140 machines, resulting in effective transition.
 - Solved complex material handling problems with innovative Bowl Coiler attached to Automated Hose Feeder. Incorporated Automated Stopper interfacing with Bowl and Hose Feeder. 100% free from the operator collecting hoses and can now perform other tasks while waiting.
 - Annually saved ~4k labor hours (85% reduction).
 - Developed a Power App + Microsoft List tracking system to identify root causes of scrap and improve process feedback loops, driving ~\$30K in annual savings.
- Led casting assembly layout for Las Vegas expansion with scalability and automation in mind.
 - Introduced material-flow system reducing 90% NVA waste due to operator traveling.
 - Designed U-cellular flow for VF/ST/UMC lines compatible with future AGVs.
 - Adjusted workstation capacity $\pm 50\%$ to align with takt time.
- Gained buy-ins from stakeholders, improving productivity across various work-areas.
 - Re-established and optimized process flow, identifying and eliminating non-value-added wastes.
 - Updated BOMs, routing, work instructions, and standard times.
 - Purchased capital equipment to improve ergonomics and efficiency.
 - Leverage data-driven decision making to achieve results and align stakeholders.
- Introduced new products, reducing lead-time and cost per part, saving ~\$36k annually on a gasket foam project.

Manufacturing Engineer 2

10/2019 to 5/2022

Fralock Holding, Valencia, CA

- Established ASTM/Mil-compliant in-house testing processes, automating workflows from peel to reporting.
- Collected data, analyzed trends, and established KPIs to track quoting turnaround times.
- Initiated continuous improvement projects and formed a team to enhance the quoting process.
 - Implemented a Design for Manufacturing chart for the Quote Team, capturing tribal knowledge.
 - Collaborated with engineering techs and operators to gather feedback and understand capabilities.
- Managed Projects, interfaced with customers from quoting to production to shipping.
 - Determined capabilities and feasibility of creating parts per drawing.
 - Familiarized with CNCs (Fiber Optic, CO2 Laser, Milling, Knife Cutter), Clean room operations, Die Cutter (Rotary & Hydraulic Press), CMM & Quality operations, part marking, and packaging.
 - Supported production to resolve quality issues by understanding and correcting root causes.
 - Work with suppliers/vendors to ensure products received are per prints as intended.
 - Communicate on status of project and ensuring parts get shipped on time with minimal discrepancy.
- Performed R&D for Facebook Reality Lab. Designed Microfluidic flex cable, yielding positive results.
- Successful R&D with Lam Research within the semiconductor sector. Generated additional revenue and projects.

Mechanical Manufacturing Engineer

10/2017 to 8/2019

The Foam Shop (George B Woodcock, Inc.), Chatsworth, CA

- Programmed Universal-Robots (UR5) gluing dispensing, Flow-path for Waterjet, and Baumer for Vertical Saw.
- Designed for Manufacturability and set up files for CNC machines, and floor production.
- Reverse-engineered products using AutoCAD and Solidworks to create foam mold designs.
- Created clean sheet designs, and releasing for Samples, First Articles, and Productions.
- Developed jigs and fixtures for robot and die processes.
- Implemented solutions for re-work products and retrofitting to improve production efficiency.

Internship, Project Manufacturing Engineer 6/2017 to 9/2017
 Stratasys Direct Manufacturing, Valencia, CA

- Resolved CAPA by conducting experiments and using data to find optimal solutions.
- Documented, revised, and developed work instructions.
- Conducted a Concept Design Phase, Design Review Phase, and Production Phase.

Chief Design Officer/Co-founder 9/2012 to 6/2017
 Advanced Material Designs, Walnut, CA
www.original-greek.com

- Developed a process flow that became the standard operation.
- Designed and prepared products for feasible production using CNC lasers/routers and wide-format printing machines.
- Created a subsidiary company "Original-Greek" in September 2015, resulting in an average sales growth of 30%.
- Increased throughput by implementing Lean Manufacturing and Kaizen principles.
 - Encouraged the team to meet weekly to share ideas and techniques for process and product improvement, as well as boosting internet traffic.
- Consulted with customers to ensure design approval before production release.

EDUCATION:

California State University of Northridge (GPA: 3.94) 2/2022 to 12/2023

Master of Science in Manufacturing Systems Engineer

- Consistently assumed the role of Team Leader in every project, steering group dynamics and project direction.
- Constructed a 6 Degrees of Freedom (DoF) articulated arm using Arduino, enabling movement control through a potentiometer slider, and implementing a pick-and-place recording feature.
- Engineered a dynamic Virtual 3D Printer on the Omniverse platform, integrating Python scripts to interpret user-input G-code for realistic printer motion simulation, and created a GUI window for users to load G-code.
- Utilized Inductive Automation's Ignition to engineer a Digital Twin of an Arduino setup, integrating real-time virtual representation of button presses and LED responses.

California State Polytechnic University, Pomona 3/2011 to 6/2017

Bachelor of Science in Manufacturing Engineer

- Designed for manufacturability while collaborating with peers on various projects.
- Learned and applied manufacturing methods, including the creation of fixtures and tooling.
- Worked with colleagues to solve obstacles using statistical data analysis.
- Applied Kaizen and Lean Manufacturing principles to a start-up company co-founded in 2012.

SKILLS:

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| • Solidworks, Catia, Auto-Cad, and Master-cams | • Lean Manufacturing | • Arduino / Raspberry Pi |
| • Planning and Design of processes and products | • DMAIC/PDCA Methodology | • Python/VBA/C++ |
| • Geometric Dimensioning and Tolerancing | • Discrete Simulation: Tecnomatix & ProModel | • Inductive Ignition |
| • ERP System: SAP, Made2Manage, ShopTech E2 | | • Data Cleaning/Analysis |

ACTIVITIES/CERTIFICATES:

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| • Lean Specialized Credential (ASQ) | 2022 |
| • Keys to Effective Communication | 2021 |
| • Green Belt Lean Six-Sigma (CPP) | 2019 |
| • Yellow Belt Six-Sigma | 2016 |