

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 SAP (ERP).
 - Annually saved ~4k labor hours and ~\$30k in scraps.
 - Developed and implemented VBA and SAP macros to create a dashboard template, facilitating SAP integration and enhancing workflow efficiency.
 - Optimized BOMs and updated routings for 140 machines, resulting in improved operational efficiency.
 - Trained a new team member on the utilization and benefits of the dashboard to support transition.
 - Solved complex material handling problems with innovative solutions, created Bowl Coiler attached to Automated Hose Feeder. Incorporated Automated Stopper interfacing with Bowl and Hose Feeder.
- Utilized FDM 3D printers to expedite the prototyping and implementation phases.
- Gained buy-ins from stakeholders, improving productivity.
 - Re-established and optimized process flow, identifying and eliminating non-value-added wastes.
 - Updated operations, work instructions, and standard times.
- Purchased capital equipment to improve ergonomics and efficiency.
- Introduced new products, reducing lead-time and cost per part.
 - Conducted experiments to validate new materials, saving ~\$36k annually on a gasket foam project.
 - Established new processes and work instructions, training operators upon successful implementation.
- Conducted machine maintenance and troubleshooting, collaborating with operators for effective solutions.

Manufacturing Engineer 2

10/2019 to 5/2022

Fralock Holding, Valencia, CA

- Established in-house testing processes compliant with ASTM and Mil Standards.
- Automated process flow from peel testing to report generation.
- Supported the Quote team by collecting data, analyzing trends, and establishing 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.
- Successfully determined BOMs and routings, designing and manufacturing new products that won new business from the semiconductor sector, generating additional revenue.
- Supported production to resolve quality issues by understanding and correcting root cause.
- Managed Projects from quoting to resolving issues that were preventing products from shipping.
- Work with suppliers/vendors to ensure products received are per prints as intended.
- Performed research and development for Facebook Reality Lab, yielding positive results.

Mechanical Manufacturing Engineer

10/2017 to 8/2019

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

- Reverse-engineered products using AutoCAD and Solidworks to create foam mold designs.
- Designed for Manufacturability and set up files for CNC machines, and floor production.
- Created clean sheet designs, and releasing for Samples, First Articles, and Productions.
- Programmed Universal-Robots (UR5) gluing dispensing, Flow-path for Waterjet, and Baumer for Vertical Saw.
- 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 used data to find optimal solution.
- 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 |
| • Member of SME, and AMS | 2017 |
| • Yellow Belt Six-Sigma | 2016 |
| • Associate Degree of Drafting Technology (RCC) | 2008 |
| • Engineering Graphic and Aide Certificate | 2008 |