ENO SHIRA, EIT

Philadelphia, PA | 215-715-1143 | enoshira13@gmail.com
LinkedIn | Portfolio

Manufacturing Engineer (EIT) with 2+ years of experience in aerospace fastener production, lean manufacturing, continuous improvement, and precision manufacturing processes. Skilled in CAD design, fixture development, ERP systems, and cross-functional collaboration. Proven success leading technical manufacturing projects and creating and optimizing layouts. Holds an MS and BS in Mechanical Engineering with an aerospace concentration, with strong analytical, design, and programming skills.

PROFESSIONAL EXPERIENCE

Fastener Dimensions, Inc. - Pennsauken, New Jersey
Manufacturing Engineer | April 2024 - Present

- Created 12+ routers and travelers monthly for the manufacturing of aerospace-standard fasteners, including NAS, MS, AN, and AS, while ensuring conformance with industry regulations, specifications, and standards
- Produced 20+ manufacturing shop, tooling, and outside vendor prints monthly to support the production of aerospace fasteners
- Coordinated with vendors regarding outside services, including heat treatment, coating, and testing, to allow for timely delivery and adherence to quality standards
- Issued 60+ purchase orders monthly for outside processes, ensuring timely delivery, regulatory compliance, and budget adherence
- Led continuous improvement projects, including developing work instructions, optimizing layouts, and conducting time studies, contributing to an On-Time Delivery (OTD) rate of 94%
- Designed and implemented custom fixtures, gauges, and storage systems to improve in-process measurement efficiency, process consistency, and shop organization while reducing costs

SPS Technologies - Jenkintown, Pennsylvania
Engineering / Operations Co-op | May 2020 - September 2020

- Performed root cause analysis for defective and scrap parts for the 12 bolt departments in the organization
- Collected, interpreted, and distributed data concerning bolt shop order rejections for the use of supervisors in daily meetings
- Automated worksheets to produce monthly quality report cards given to operators
- Contributed and engaged in 6S projects used to improve productivity, organization, and safety in the workplace, resulting in an annual cost savings of approximately $36,000
- Designed structures to be used for the improvement of the disposal of twist-off splined extensions
- Fabricated tool holders to be used for the storage and organization of operator tooling and equipment

Eaton Corporation - Glenolden, Pennsylvania
Manufacturing Engineering Co-op | April 2019 - September 2019

- Engineered fixtures to be used during the assembly and fabrication process to increase efficiency
- Drafted facility layout in AutoCAD to support lean manufacturing initiatives
- Participated in Rapid Improvement Events for the elimination of waste in manufacturing processes and increased productivity using 3P, 5S+, Standard Work, and VSM
- Developed and released Manufacturing Instructions
- Conducted time studies for the calculation of cost out and verification of processes to be used for the justification of the purchase of a new laser marking machine
- Utilized vinyl cutter software to create masking templates for paint processes

EDUCATION

Drexel University - Philadelphia, Pennsylvania
M.S. Mechanical Engineering | GPA: 3.66 | September 2021 - March 2023
B.S. Mechanical Engineering, Aerospace Concentration | GPA: 3.51 | September 2016 - June 2021

- **Honors and Awards:** Pi Tau Sigma International Honor Society, Dean's List, AJ Drexel Merit Scholarship, Cum Laude

SKILLS

CAD & Design: SolidWorks, CATIA, Creo Parametric, Fusion 360, Inventor, AutoCAD, SmartDraw
Simulation & Analysis: ANSYS, MATLAB Simulink, LabView, VisualAnalysis, IBM SPSS, ModelSim, Multisim
Programming: MATLAB, Python, HTML, CSS
Manufacturing Tools: JobBOSS (ERP), Microsoft Office, Graphtec, 3D printing, lean manufacturing, GD&T, process planning, time studies, fixture design, work instruction development, AS9100 (familiarity), NADCAP vendor compliance, traceability
Languages: Conversational Spanish, Fluent Albanian
Certifications: Engineer in Training (EIT) - Pennsylvania, Certified October 2023

PROJECT EXPERIENCE

Arduino Surveillance Eyewear - Drexel University
Lead CAD Designer | September 2020 - June 2021

- Modeled and simulated novel eyewear product that allows the user to view video feed from a camera accessory placed anywhere within wireless range using an ESP32-CAM and TTGO T-Display
- Developed CAD part and assembly files for simulation and fabrication of a working prototype as well as for a proof-of-concept model used in presentations and technical reports, resulting in a system weight of 2.48 oz optimized for user comfort
- Presented process and results of one of two working models for product to 100+ Drexel University advisor, staff, and peers
- Wrote a 20+ page product proposal and technical report for stakeholders

Aircraft Design & Flight Testing - Drexel University
Lead Design and Aerodynamic Analyst | September 2020 - December 2020

- Designed and fabricated fixed-wing glider using a NACA 6412 airfoil, optimizing for maximum cruise velocity range at sea level through iterative aerodynamic testing
- Calculated and validated key flight parameters including Reynolds number, coefficient of lift/drag, static margin (-0.5), and cruise velocity (1.9-14.2 ft/s)
- Resolved stability and control issues through redesign of fuselage, tail, and wing geometry while achieving stable flight with a 52.4 g payload capacity
- Conducted flight testing and performance analysis, generating drag-polar curves, takeoff/landing distances, and comparison with theoretical airfoil data (≤16% error)