

ENO SHIRA, EIT

Philadelphia, PA | 215-715-1143 | enoshira13@gmail.com
[LinkedIn](#) | [Portfolio](#)

Manufacturing Engineer (EIT) with 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. MS/BS in Mechanical Engineering with an aerospace concentration, along 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 for the production of 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: EIT Certification - Pennsylvania, 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 a 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 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)