

ENO SHIRA, EIT

Philadelphia, PA

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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

Drexel University

Philadelphia, Pennsylvania

Student Grader—MEM 351: Dynamic Systems Laboratory I

January 2023 - April 2023

- Graded and provided timely written feedback for 5 biweekly group lab reports across 6 different lab sections spanning 115 students
- Compiled, analyzed, and submitted student grading data for the Accreditation Board for Engineering and Technology (ABET) assessment
- Initiated and scheduled meetings with the class professor to discuss grading protocols and progress as needed

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

C. & J. Nyheim Plasma Institute

Camden, New Jersey

Student Researcher

April 2018 - September 2018

- Simulated fluid flows of various properties through different geometries to help in the research of applied plasma
- Presented simulated results and other findings to the employer and other relevant researchers
- Assisted in organization and implementation of the 7th International Conference on Plasma Medicine

EDUCATION

Drexel University

Master of Science in Mechanical Engineering (**Cuml. GPA: 3.66**)

Philadelphia, Pennsylvania

September 2021—March 2023

Bachelor of Science in Mechanical Engineering, Aerospace Concentration (**Cuml. GPA: 3.51**)

September 2016—June 2021

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

SKILLS/CERTIFICATIONS

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

Interpersonal Skills: Communication, Problem-solving, Teamwork, Adaptability, Time management, Attention to detail

PROJECT EXPERIENCE

Personal Website Portfolio

Personal Project

Web Designer

April 2024

- Utilized HTML and CSS to develop visually appealing and user-friendly portfolio website to showcase professional and academic projects, resumes, and certifications
- Employed GitHub Pages to host professional portfolio website, enabling public accessibility and reliability to allow for version control and seamless updates
- Integrated PDF embedding functionality and code minimization, allowing for a more interactive and immersive experience, leading to improved user satisfaction

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 ($\leq 16\%$ error)

Photovoltaic Cellular Charger

Drexel University

Designer and Theoretical Analyst

March 2017 - June 2017

- Designed and manufactured photovoltaic cell phone charger with reasonable recharge time
- Tested prototype for efficiency and functionality with a series of tests carried out in varying environmental conditions
- Showcased finished project in front of a panel of Drexel University professionals in relevant field

Raman Spectroscopy and Graphene Oxide Research

University of Pennsylvania

Student Researcher

May 2016 - June 2016

- Researched graphene sheets, carbon nanotubes, and hollow carbon spheres for potential uses in supercapacitors
- Utilized a Raman spectrometer to analyze the properties of graphene
- Prepared and presented information pertaining research to associate professor and research team

VOLUNTEERING

**Laura W. Waring School Volunteer
Lecturer and General Assistant**

Philadelphia, Pennsylvania
June 2016

- Presented various engineering disciplines and career paths to middle school students
- Supported students with academic inquiries and aided the teacher when needed
- Instructed students in crafting presentations using Google Drive

ACTIVITIES

Member, Pi Tau Sigma International Honor Society, 2020 - Present

Member, American Society of Mechanical Engineers, 2018 - 2023

Member, Institute of Electrical and Electronics Engineers, 2017 - 2018