Stephen J. Martino

Education

Siena College

B.S. Applied Physics GPA: 3.50 / 4.0

Loudonville, NY

Expected May 2024

Schenectady, NY Expected May 2025

Clarkson University

M.S. Mechanical Engineering via 4-1 Program

Experience

Centrotherm Albany, NY

Mechanical Engineering R&D Intern

May 2023 - August 2023

- Designed a 6-feeder manifold for an OEM to integrate into their boiler cabinets, optimizing space, efficiency and functionality
- Constructed a prototype of the manifold, utilizing CAD assembly and subsequently conducting testing to validate its performance
- Engineered a customized jig for consistent and reproducible results in manufacturing processes, streamlining production efficiency
- Developed work instructions to guide the production team in mass producing the manifold, adhering to quality standards
 Generated technical drawings and work instructions, maintaining accurate documentation for production and assembly processes
- Leveraged advanced 3 and 5-axis CNC machinery to craft intricate parts for jigs and achieve precision cutting of profiles in pipes
- 3D printed jigs for polypropylene pipe securing and cutting, improving precision

FuzeHub Albany, NY

Solutions Program Intern

June 2022 - October 2022

- Led 3D modeling of a product for a company-wide event, overseeing the entire process from inception to mass production
- Automated existing processes, significantly enhancing data acquisition efficiency for improved startup-to-manufacturer matching
- Participated in client assessment calls, collaborating with colleagues to identify optimal matches between clients and manufacturers
- Conducted on-site visits to local manufacturers, gaining valuable insight into their operations, facilities, and capabilities

Siena College Physics and Engineering Department

Loudonville, NY

Introduction to Engineering TA

January 2022 - Present

- Collaborate with the professor to plan & deliver engaging workshops, ensuring students grasp fundamental engineering principles
- Conduct hands-on lab sessions, providing step-by-step guidance & support to students as they work through engineering projects
- Demonstrate the safe and effective use of 3D printers, laser engravers, and saws, emphasizing best practices and techniques Director of Siena College 3D Printing & Laser Engraving Lab
- Oversee the operations of the 3D printing and laser engraving lab, ensuring equipment maintenance and functionality
- Diagnose and resolve technical issues with printers and laser engravers, employing advanced troubleshooting skills
- Provide training to upper-class engineering students on use of 3D printing, laser engraving, and associated software
- Develop and update standard operating procedures to ensure safe and efficient utilization of lab resources

Siena College VIPER Radio Telescope

Loudonville, NY

Physics Summer Research Scientist

May 2021 - July 2021

- Resolved technical limitations of a radio telescope by enabling data acquisition from the receiver on the telescope's dish
- Constructed a control box tailored to the receiver, facilitating seamless integration with the radio telescope system
- Implemented a series of amplifiers to convert 120-volt power to a functional 12-volt supply, ensuring optimal operation

Skills

Coding Languages and Software

- Solidworks, Autodesk Inventor, Creo, Ultimaker Cura, Autodesk Meshmixer, Java, Python, HTML, LaTeX
- Matlab, Git, CSS, Linux, Docker, Arduino, Google Colab, Microsoft Office Suite, SketchUp, Glowforge

Projects / Personal

o Personal Website 2021 - Present

Designed & coded a personal portfolio HTML website to showcase extensive experience in engineering & woodworking
 3D Printing

2017 - Present

- Achieved seamless integration of CAD & Meshmixer workflows for efficient model creation and modification
- Fine-tuned print settings in Cura to ensure optimal results across a range of 3D printing projects
- Produced a diverse range of 3D-printed objects, showcasing a proficiency in design, editing, and printing processes

Woodworking

2014 - Present

- Established a fully-equipped workshop, curated an extensive array of tools & lumber, and executed a multitude of personal woodworking projects to hone and expand craftsmanship. Additionally, launched a small-scale woodworking venture to craft bespoke projects for discerning clientele, cultivating an entrepreneurial spirit

o Siena College Club Baseball

2020 - Presen

- Provide support to upperclass players, mentor younger teammates, while taking a leadership role on the team