Stephen J. Martino

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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 September 2021 - Present
- 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, Arena DES
- Matlab, LaTeX, Git, Linux, Arduino, Google Colab, Microsoft Office Suite, SketchUp, Glowforge

Projects / Personal

2021 - Present Personal Website

 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

Siena College Club Baseball

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