

Adamaryz D. Vargas

LinkedIn: www.linkedin.com/in/adamaryzvargas

Phone: (585) 629-0414

Email: adamaryz.diana.vargas@gmail.com

Objective

A mechanical engineering professional with over two years of experience in research and development, quality, and design engineering. Experience working with projects from design and concept to mass production and beyond with quality and cost saving efforts. Experience managing and mentoring co-ops/interns and technicians to allow efficient and effective testing and progress to be completed. A proven track record in systems integration, prototyping, and design and validation of mechanical systems. Passionate about sustainability, looking for a company that has extensive sustainability goals and is aiding in preventing further climate change. Seeking a mid-level engineering position near Boston, MA, or remote.

Education

Rochester Institute of Technology

Mechanical Engineering Technology, Bachelor of Science

Dean's List: Fall 2022 and Spring 2023, 2024

Jobs: Strength of Materials TA, Student Supervisor, and Student Ambassador

Study Abroad: Going Green Exploration Innovations in Engineering, Dublin, Ireland - Attain knowledge about UNDP sustainability goals and development, especially in engineering innovations. Immerse in the culture of Ireland and explore historical and engineering sites in Dublin.

Experience

R&D Mechanical Engineering Needham, MA

July 2024 to present

SharkNinja

- Lead R&D projects to understand and identify key features and specifications to drive product performance
- Build and observe prototypes, assessing key functions to understand system integration and apply learnings to provide insight for design changes
- Involvement throughout the entire product lifecycle from ideation to post mass production quality efforts
- Mentor and manage co-ops/interns and technicians
- **Projects**
 - Quality Improvement of Existing Coffee Makers, **Role:** Lead R&D Engineer
 - Designed a patent-pending dynamic algorithm to improve machine performance
 - Designed and integrated components into an existing system to provide quality improvements
 - Developed temperature and pump control sequence for new feature and integrated it into an existing system
 - New Coffee Maker, **Role:** R&D Engineer
 - Researching and developing brewing methods and how to optimize mechanical systems for the best outputs
 - Develop and validate mechanical design changes and give direction on improvements
 - Aiding in the design and creation of a complex high-pressure mechanical system

Quality and Sustaining Engineer Burlington, MA

July to December 2023

Keurig Dr Pepper

- Lead quality improvement efforts on a variety of brewers based on consumer ratings and reviews
- Presented project proposal to key stakeholders for resource allocation
- Built attribute prototypes for initial brewer concept, utilizing existing brewer components
- **Main Project:** Probe Housing Test Stand **Role:** Lead Quality Engineer Co-op
 - Lead design efforts on creating a test fixture to validate water probe housing
 - Utilized SolidWorks to design efficient test fixtures for water probe validation
 - Incorporated an air piston and Arduino for automation and efficient testing procedure
 - Collaborated with field experts to enhance design and procedure

Engineering Services/CAD Engineer Andover, MA

January to July 2022

Vicor Corporation

- Generated CAD models and drawings, using GD&T process, with SolidWorks for PCBA components
- Utilized PLM system for ECOs, NCRFs, BOMs, mechanical checks, and outline drawings
- Followed company regulations for tolerancing, specifically with thru-holes in PCB for power chips and other components
- **Main Project:** Aluminum Mount for 80lb Equipment **Role:** Lead CAD Engineer Co-op
 - Designed a mount for transportation and external testing, thermal and electrical, using SolidWorks

Skills

SolidWorks, FEA, CFD, Microsoft Office, MATLAB, Arduino, Thermal Fluids, Mechanical Analysis, Fluid Mechanics, Manufacturing Processes, DFMEA, DQTP, PSI

Machinery: 3D Printers, MIG/TIG/STICK Welding, CNC Mill, Laser Cutter, Metal/Wooden Lathe, Plasma Cutter, Water Jet

Additional Projects

Medical Supply Drone

- Used SolidWorks to design custom CAD models and drawings for a quadcopter
- Completed and demonstrated proficiency in Six Sigma Green Belt DMADV to become Six Sigma certified

Personal Projects

- Designed and 3D printed using SolidWorks and FlashPrint: K-cup Holder, Jenga Block Container, Bouquet Spreader

Awards

SolidWorks Associate - Dassault Systèmes June 2023 - Completed
Machine Design Certification

Green Belt Six Sigma - Department of MMET at Rochester Institute of Technology