Lorenzo Dova

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EDUCATION

MS Product Design and Manufacturing
Boston University
Expected Dec 2024

MS Mechanical Engineering w/ Minor in Applied Mathematics
University of Arizona
Jan 2014 - May 2019

DESIGN SUMMARY

My goal as a product designer is to merge analytical skills with user centered design to create thoughtful and functional products. I am driven by my passion for growth, and continue to evolve as a product designer through rigorous study and practice. I aspire to craft products that resonate with users and offer novel experiences that make a positive impact. These values shape my approach to design, where every project is an opportunity to help people live better and work smarter.

SKILLS

3D CAD: SolidWorks, Onshape
Rendering: Keyshot, Blender
Adobe: Illustrator (2D Drawing)
Digital sketching: Procreate
Manufacturing: 3D Printing, Casting, Machining, Welding, Hand Forging, Soldering, Laser Cutting, Woodwork
CAM, fabrication and prototyping
Basic circuitry and Arduino
MS Office

STRENGTHS

Learning
Driven by a strong curiosity to explore design methodologies and emerging technologies for innovative products.

Teamwork
Excel in collaborative environments, valuing open minds, communication and diverse talents.

Leadership
Led two high-performing teams, merging technical expertise with creative design.

PROJECTS

Cove Chair
Product Design (Team Lead), Aug 2023 - Dec 2023
- Led product ideation, utilizing digital and physical sketching, resulting in 80 initial ideas laying the foundation for creative exploration and refinement.
- Conducted thorough research into design and user experiences, complemented by feedback from 40+ survey participants, guiding design decisions and ensuring alignment with user expectations.
- Guided product development, emphasizing user centered design and analytical skills, resulting in 8 functional prototypes and two 50% scale models, reinforcing confidence in product development direction.
- Utilized CAD with a focus on design and manufacturing, to deliver a detailed 90-page drawing package, earning recognition from professor for outstanding design and sensitivity to manufacturing.

Fuel Injection Rotary Vane Pump
Product Design (Team Lead), Aug 2023 - Dec 2023
- Employed a broad range manufacturing techniques to fabricate hydraulic rotary vane pump components from strict design drawings, resulting in a fully functional pump prototype capable of pumping water.
- Led pump redesign for fuel injection application integrating thorough research and engineering across 5+ design iterations, increasing overall team confidence in fulfillment of design specifications.
- Encouraged communication and creative thinking through collaborative whiteboard sketching and ideation, merging user centered design with design for manufacturing and assembly.

EXPERIENCE

Engineering Product Innovation Center, Boston University
Lab Assistant, Aug 2023 - Present
- Trained over 50 students in safe and effective use of technology and machinery including manual mills, lathes, drill presses, laser cutters, and 3D printers, enhancing overall shop safety and operational efficiency.
- Supported 20+ student projects by providing insight on design feasibility and applicable manufacturing techniques, contributing to successful project completions with a focus on user-centered design principles.
- Designed and implemented a comprehensive Excel-based tracking system for EPIC at BU, enabling efficient tracking of material usage and calculation of material cost for 40+ senior capstone design projects.

Omnicell
Systems Test Engineer, Feb 2020 - Mar 2022
- Acknowledged by senior leadership for pivotal contributions in data analysis and design verification testing, instrumental to completion of $25M contract for Fresenius Kabi's (FK) syringe dispenser system.
- Led development and deployment of 4 automated test fixtures reducing manual test time by more than 10x and improving test productivity by up to 300% while providing accelerated product failure data.
- Collaborated on design improvements for medication dispensing system, focusing on product reliability and critical design decisions, enhancing product usability and reducing unintended syringe dispensations by 90%.
- Authored over 50 test cases, protocols, and reports alongside colleagues, using Agile software, significantly enhancing documentation control and meeting 95% of project deadlines in a deadline-driven environment.