Belen Szentes

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EDUCATION

Rice University, *Houston, TX* *May 2025*
Bachelor of Science — Mechanical Engineering
Engineering Design Minor, Global Health Technologies Minor

INDUSTRY EXPERIENCE *(2.5 Years)*

Tesla *Fremont, California* *May 2024 - August 2024*
Vehicle Engineering Design - Seating & Safety
- Led designing, prototyping and user safety testing development on a critical seating assembly to be implemented in the final production of multiple electric vehicle programs, which is being submitted for a patent
- Designed and performed biometric user studies to quantify occupant comfort and safety and analyzed data in order to inform my design decisions
- Collaborated closely with air-cell suppliers and plastic injection molding suppliers to improve manufacturability of my designs and evaluate test results

Apple *Cupertino, California* *January 2023 - August 2023*
Product Design Co-op - iPad Team
- Owned and resolved several critical mechanical design build issues by performing root cause analysis, redesigning modules on NX CAD, and working closely with metal stamping, foam and adhesive suppliers to manufacture, evaluate and down select final designs
- Developed standards of practice to evaluate the mechanical performance of my prototypes and analyze data against results I gathered from FEA simulation using ANSYS

Cala Health *San Mateo, California* *May 2022 - August 2022*
R&D Mechanical Engineering Co-op - R&D New Technology Team
- Developed and performed bench and human testing protocols to characterize the electromechanical properties of several electrode materials and soft goods materials for an auricular wearable neuromodulating device
- Identified a major mechanical design conflict then redesigned, tested and presented results of 2 viable prototypes as solutions, one of which has a published patent
- Designed, prototyped and produced a subcomponent assembly fixture for a wearable bioelectronic neuromodulating device that significantly increased the assembly process's precision and speed by 4 times

Johnson & Johnson (Ethicon Endo-Surgery) *Cincinnati, Ohio* *August 2021- May 2022*
R&D Engineering Design Co-op - New Product Development Team
- Led effort to redesign an electromechanical component on an laparoscopic energy device through brainstorming, concept selection tools, prototyping and tissue lab testing
- Assisted in project management of plastic and packaging suppliers by managing quotes to create the team's budget

ENGINEERING DESIGN PROJECTS

Children's Soap Dispenser Attachment *July 2020 - December 2020*
1st Place Pediatric Design Track, 2nd Place Overall
- Collaborated on a team of five undergraduate students to design, prototype and test a child-friendly soap dispenser attachment that serves to incentivize proper hand washing etiquette according to CDC guidelines

LEADERSHIP EXPERIENCE

El Cotorreo Lead (Johnson & Johnson) *August 2021 - May 2022*
- Founded and led a bi-weekly program introducing the Spanish language and Latin culture to Ethicon employees to facilitate interactions with our international partners

RELEVANT SKILLS

NX, SolidWorks, CATIA, ANSYS, CAD Drawings, CAD Design, Design for Manufacturing (DFM), Minitab, JMP, GR&R, Basic GD&T, Basic Six Sigma Analysis, Microsoft Suite, Jira, Matlab, 3D Printing, Fluent Spanish