

Sebastian Arevalo

Associate Mechanical Engineer - Medtronic

Denver, CO 80210

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Professional Summary

Results-driven Senior Mechanical Engineer with over 8 years of experience, leading complex mechanical design, manufacturing, and project management initiatives across the entire product lifecycle. Proven ability to lead cross-functional teams, including engineering and supply chain, using advanced tools like SolidWorks, DriveWorks, CATIA and ANSYS to deliver innovative hardware solutions that balance aesthetics and user-centered design.

Willing to relocate: Anywhere

Authorized to work in the US for any employer

Work Experience

PACKAGING MODULE R&D ENGINEER

Intel Corporation-Phoenix, AZ

January 2022 to Present

- Oversaw the design, validation and integration of injection molded (IM) JEDEC plastic trays, sheet metal retention plates and material handling system equipment (End Effectors, Pedestals, Collets, etc..) for both Low and High-Volume Production Support.
- Designed and optimized over 1000+ Injection Molded Trays, Retention Plates, and End-Effector Assemblies using advanced CAD and simulation software.
- Streamlined tray production by implementing advanced quality control systems and innovative design standards, resulting in a 60% increase in service lifetime and realizing cost savings over \$50M through optimized yield.
- Facilitated weekly collaboration with global teams to discuss updates, feedback, and support for Continuous Improvement Projects (CIP) and quality initiatives.
- Spearheaded the development and qualification of three new materials to address critical ESD, Foreign Material (FM), and Blistering issues in JEDEC trays, generating over \$3M+ in annual savings per product.
- Leveraged SolidWorks and DriveWorks to develop automated workflows, significantly reducing design and drafting lead times by 90% and yielding an annual time savings of 1800 hours.
- Led design and manufacturing improvements for existing equipment, achieving a 65% reduction in manufacturing lead times and an 85% decrease in costs.

Mechanical Engineer & Field Service Engineer

Interlink Engineering-Phoenix, AZ

December 2018 to December 2022

- Installed, diagnosed, and repaired complex industrial 3D printers for clients.
- Engineered solutions for a diverse clientele, encompassing the design, drafting, and manufacturing of over 300 products and assemblies.
- Designed, analyzed and tested medical components, housings and fixtures in the production of a next-generation manometry technologies.
- Collaborated with cross-functional teams to design and develop ADA-compliant ramp deployment systems and interior/exterior plastics for minivan conversions.

- Led the design and manufacturing of enclosures, skids and trailers for power generator systems.
- Reverse engineered products using SolidWorks and 3D Scanning to provide models and detailed drawings to clientele.
- Analyzed and enhanced clientele designs using SolidWorks and ANSYS CFD/FEA simulation software.

Mechanical Engineer

Medtronic-Los Angeles, CA

January 2018 to November 2018

- Developed and refined new manometry system concepts and designs for catheters, leveraging SolidWorks and ANSYS for testing and simulation.
- Designed, analyzed, and optimized functional and performance test protocols for devices and products.

Mechanical Designer & Laser Technician

NicoNat Manufacturing-Los Angeles, CA

April 2017 to December 2017

- Generated component and assembly fabrication drawings according to customer sketches and specifications using SolidWorks and Draft Sight
- Prepared and cut laser files based on component and assembly fabrication drawings for further fabrication
- Oversaw the fabrication of customer and shop designs from concept to full completion

Mechanical Designer & Drafter

Carousel USA-Irwindale, CA

October 2016 to February 2017

- Assisted senior design engineers in the design and drafting of mechanical systems using SolidWorks and Excel
- Reverse engineered physical parts and translated hand sketches into working components

Junior CAD Designer

Northern Arizona University Machine Shop-Flagstaff, AZ

August 2014 to May 2016

Arizona

- Revised and updated design calculations, bill of materials, and existing drawings
- Generated both 2D and 3D models and drawings from customer sketches and specifications using SolidWorks

Education

Bachelor of Science in Mechanical Engineering in Mathematics

Northern Arizona University-Flagstaff, AZ

May 2016

Skills

- Robotics
- Drafting
- Product development
- Manufacturing

- SolidWorks
- Mechanical design
- AutoCAD
- Plastics injection molding
- Pro/ENGINEER
- System design
- CATIA
- Root cause analysis
- GD&T
- Assembly
- Machining
- CAD
- Creo

Certifications and Licenses

Certified SOLIDWORKS Professional- Advanced Weldments

February 2021 to Present

Certified SOLIDWORKS Professional - Advanced Sheet Metal

September 2020 to Present

Certified SOLIDWORKS Professional- Advanced Surfacing

June 2020 to Present

Certified SOLIDWORKS Professional - Mechanical Design

June 2020 to Present

Patents

Illumination Control in Robotic End Effector Manipulation. U.S. Patent (#20250135663)

May 2025

Circumferentially Sensing Manometry Systems and Methods with Catheter Utilizing (#PCT/US21/55367)

Patent Pending.

Additional Information

Skills:

- Technical: Finite Element Analysis (FEA), Computational Fluid Dynamics (CFD), GD&T, CAD, Drafting, Machine & Automation Design, DFM, DFMA

- Tools & Software: SolidWorks, CATIA, ANSYS, DriveWorks, Auto CAD, MATLAB, Microsoft Tools (Word/Excel/PowerPoint), LabVIEW, JMP, Windchill
- Manufacturing: 3D Printing (FDM, MJF, SLA, SLS, DMLS), 3D Scanning, CNC Milling, Sheet Metal Fabrication, Mold Design (Injection, Thermoform & Silicone), Laser & Plasma Operation