

Professional Summary

Self-motivated and solutions-driven Mechanical Engineer and Program Manager with strong communication and analytical skills. Demonstrated project management and technical leadership capabilities in product design and manufacturing. Strong understanding of engineering workflows, solid and fluid mechanics, heat/mass transfer principles, and materials. Experience bringing a product from concept through prototype to large-scale production and managing relationships with local and international contract manufacturers.

Core Qualifications

- Exemplary mechanical designer for Injection Molded, CNC, and AM components
 - Black-belt CAD/CAM skills using multiple software packages
 - Accomplished at machining and rapid prototyping
 - Skilled producer of drawings (GD&T) and technical documentation
 - Expert problem-solver, organized, and able to deliver on-time
 - Highly adept at creating design decision-making frameworks
 - Proficient in design analysis and simulation using Finite Element Analysis software
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Work Experience

Technical Program Manager- Education, Autodesk Inc., Boston, MA, November 2018- present

Develop curriculum and train university faculty in CAD/CAM/CAE workflows using Fusion 360 to increase adoption across the education market. Understand user pain points with CAD/CAM tools and advise on best practices and strategy for teaching design and manufacturing to post-secondary students. Provide technical support to engineering faculty and student-led design teams at universities across North America.

Lead Mechanical Engineer, American Boronite Corporation, Burlington, MA, October 2017-October 2018

Designed proprietary Carbon Nanotube and Boron Nitride Nanotube fiber manufacturing systems for making yarns and tapes using Autodesk Inventor. Supported the testing and characterization of novel materials development by designing and building necessary test apparatus.

Mechanical Engineer, Loci Controls, Somerville, MA, July 2015-September 2017

Principal design engineer for the Loci Wellwatcher shipped in October 2016. Generated requirements leading to the design of custom machined and injection molded parts for corrosive gas sensing, routing and measurement using SolidWorks. Conducted simulations of projected failure modes using SolidWorks Simulation. Prototyped custom designs using various manufacturing methods including CNC milling. Performed failure analysis of part and system level failures. Tested electro-mechanical and plumbing assemblies. Created documentation for designs and assemblies to deliver to manufacturers and assembly houses in China and locally. Interfaced and provided support for scaling manufacturing initiatives.

Lead Mentor, FIRST Robotics Team 6201, Somerville, MA, September 2018-Present

Assist high school students with mechanical design, CAD, prototyping, and manufacturing of their competition robot.

Education

Franklin W. Olin College of Engineering, Needham, MA

Bachelor of Science in Mechanical Engineering, Class of 2015; GPA 3.5

Technical Skills

Software: Autodesk Fusion 360, PTC Onshape, Solidworks CAD, FEA and PDM packages, Autodesk Inventor, HSM Works, SprutCAM, MATLAB, Arduino, Adobe Suite, LaTeX, Salesforce, Microsoft Excel, Microsoft Access

Fabrication: 3-Axis & 4-Axis CNC & Manual Mill, CNC & Manual Lathe, FFF 3-D Printers, MIG Welder, Laser Cutter, Sheet Metal Tools, Composites, Basic shop tools