Ronak Chougule

ronakc@bu.edu | Portfolio | LinkedIn |+1 (857)-869-3538

SUMMARY

Product Design and Manufacturing Engineer with a background in Mechanical Engineering and 2+ years' experience in quality improvement, CAD, injection molding, product design, 3D printing and manufacturing. Exhibited ability to design for manufacturability and improvement of product performance. Strong understanding of metal and plastic industry such as sand casting, sheet metal fabrication, blow molding, plastic extrusion, precision machining and assembly.

PROFESSIONAL EXPERIENCE

New Product Development Co-op — Needham, MA
SharkNinja — Feb 2023- Present

- Evaluated designs for two new air purifiers using DFA, DFM metrics and made detailed modifications in prototype to support engineering builds in China
- Led product development of Shark's various home environment devices by generating test data for R&D team to validate design changes
- Worked closely with industrial design and manufacturing groups to refine and execute vision of the product
- Assisted with product design development plans and documented action items to inform factories in Asia for high volume manufacturing
- Engaged in discussion between departments on marketing, cost control and functionality of products

Mechanical Engineer Co-op — Burlington, MA
Desktop Metal — Jun 2022- Dec 2022

- Implemented concepts and followed through initial prototype and testing of vacuum chamber, print head gantry and oxygen sensor for future production
- Co-led multiple drawing reviews using SOLIDWORKS and Salesforce Propel data management
- Planned and made test rig for production setup to conduct static electricity generation experiment
- Carried cross functional process improvement for ink supply module with software team
- Prototyped sheet metal parts and brackets to specification using Bridgeport mill and FDM 3D printers

Product Design Engineer — Kolhapur, India
Wings44 — May 2020- May 2021

- Collaborated with technicians and senior engineers to ensure DFM and product performance
- Designed and manufactured creative letter boxes using SOLIDWORKS and ergonomic studies
- Created multiple injection molding drawings for various air flow controllers by collaborating with the manufacturing team
- Programed CNC Laser for precision cutting sheet metal and reducing finishing requirements
- Optimized hospital functionality by designing comfort ICU beds

EDUCATION

Boston University College of Engineering — Boston, MA
Master of Science in Product design and Manufacturing — *exp* May 2023

Vishwakarma Institute of Technology — Pune, India
Bachelor of Technology in Mechanical Engineering — Aug 2020

ENGINEERING PROJECTS

MIT Hyperloop — Sep 2021

- Prototyped Tunneling Machine including guided auger boring with Barbco Tribor, Inc
- Re-designed new safety system for cutter head and existing guidance mechanism
- Installed information acquisition system for monitoring real-time temperature, position, and velocity of steering head
- Managed onsite operations to set up the Tunneling Machine and pass the safety regulations

SKILLS

Mechanical: FDM, SLA and Metal 3D printing, Lathe, Arc welding, CNC Lathe
CAD & Programming software: SOLIDWORKS, Auto CAD, Onshape, Gibbs CAM, C, C++, Python