

Mandy Rosengren

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WORK EXPERIENCE

nTop, NYC

February 2021 - Present

Senior Solutions Engineer, July 2022 – Present

- Led the production of an internal database for workflows across applications and developed 75+ workflows within that database, such as part splitting, support structure generation, automated mold design, and prosthetic design examples using a starting mesh
- Solved challenges for customers in the industries and topics above and fostered relationships that resulted in better utilization and expansion of the accounts

Senior Onboarding Engineer, November 2021 – July 2022

- Project managed the initiative to create ten courses for [nTop Learn](#) from Advanced nTopCL and Heat Exchangers to Data Driven Design and Texturing, written by the Solution and Onboarding Engineers.
- Led a team of two Onboarding Engineers to provide beginner to advanced training content, and developed and led the first in-person training since COVID

Onboarding Engineer, July 2021 – November 2021

- Led the creation of nTop Learn, which involved the development of 20+ videos on easy to advanced topics as well as 6 courses composed of text-based lessons, follow-along videos, quizzes, and sample problems on intro topics
- Led webinars and one-on-one sessions with customers on application-specific training

Associate Customer Success Engineer, February 2021 – July 2021

- Developed content for 15+ lessons on topics for teaching nTop, developed the first self-guided training at nTop
- Taught over 15+ training topics to customers and completed training for 30+ companies in biomedical, automotive, aerospace, consumer products, and apparel industries

Industries Consulted: Medical, dental, automotive, apparel, aesthetic, aerospace, industrial

Topics Covered: computational design, latticing, support structures, slicing, topology optimization, field-driven design, static and thermal analysis, thermal management design, part splitting, prosthetic design, DFAM, automation with python

Stryker, NJ

AO Additive Technology Applications Intern

May-August 2019

- Redesigned biomedical products for additive manufacturing for a robotic arm, a spinal project, and a Trauma and Extremities instrument with computation design; developed a lattice structure library from the FEA analysis
- Assisted with workshops for R&D on DfAM; created documentation and tutorials for additive design; communicated with clients implementing their needs and requirements in designs; presented updates at weekly meetings and a final PowerPoint presentation for Additive Team

ADDITIONAL LEADERSHIP EXPERIENCE

Women in 3D Printing, Boston, Ambassador

2023 - Present

- Collaborated with local companies such as Autodesk, Nano Dimension, Artisan's Asylum, UMass Lowell and Greentown Labs, and planned networking events and panels for 3D printing professionals in the Boston Area
- Co-led communication to the entire Boston Women in 3D Printing community around events with 30-50 attendees

EDUCATION AND AWARDS

Tufts University, BS in Mechanical Engineering, *magna cum laude*, May 2020, GPA: 3.72, Dean's List (All Semesters)

American Injection Molding Institute, Mold Design: A Plastics Professional Development Course, 2023

MIT xPro, Additive Manufacturing for Innovative Design and Production, December 2021

AM Olympics, Winner of the C-17 Flight Mascot Design Challenge as Crowd Favorite, 2020

The George H. and Marion E. Gowdy Prize for Mechanical Engineering, 2019

TECHNICAL SKILLS

Computer-Aided Design: SolidWorks, nTop, Rhino, PTC, Autodesk Products

Software: Ansys Workbench and Discovery, Photoshop, Illustrator, InDesign, Microsoft Office, Slack

Coding Languages: Python, Arduino, Scratch

Equipment: FDM and SLA 3D Printers, CNC Router, Laser Cutter, Horizontal and Vertical Band Saws, Drill Press, Jump Shear, Beverly Shear, Belt Sander, Grinder, Soldering Iron, Sheet Metal Bending, Sewing Machine, Embroidery Machine, Real3D Scanner