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# Summary.

I am a hands-on Industrial Engineer that has a passion for manufacturing. I fill a number of shoes at Onshape daily; tier three support to users, problem solver to Fortune 500 customers, user experience and sounding board to developers and manufacturing expert to peers. I am looking to grow my existing manufacturing knowledge with a leader that is pushing boundaries and developing tools in the space.

# Education

### **Rensselaer Polytechnic Institute**

B.S. IN INDUSTRIAL & MANAGEMENT ENGINEERING

110 8th Street, Troy, NY, 12180

2011 - 2015

May 2018 - Present

#### Massachusetts Institute of Technology edX courses

MICROMASTERS IN PRINCIPLES OF MANUFACTURING

- Manufacturing Process Control
- Supply Chains for Manufacturing: Capacity Analytics
- Management in Engineering: Strategy and Leadership

# Experience.

**Onshape** 121 Seaport Ave, Boston, MA

PRINCIPLE PRODUCT ENGINEER

- · Lead design, tests, and implementation of standard parts, sheet metal, draft analysis and other tools used in DFM & DFA methods
- · Work with manufacturers to create design criteria for engineering software development
- Migrate standard part metadata from legacy vaults to Onshape through REST API
- Provide CAD and REST API support to customers
- Aid professional customers with CAD best practices and advice on manufacturing strategies
- Create internal tools using Python for data manipulation & customer support
- · Contribute to administration tools to speed up triaging of customer issues

**OUALITY & RELEASE ENGINEER** Jan 2016 - May 2018

- Managed agile development sprints to ensure a high-quality product for end users every 3 weeks
- Ensured that project deadlines are met by developers and outsourced teams
- · Tracked and managed development progress through JIRA and automate workflows through REST API
- Managed Onshape's partner ecosystem by testing products and collaborating with partners
- · Managed company makerspace and manufacturing education for additive and subtractive processes

## **Rensselaer Polytechnic Institute**

118 8th Street, Troy, NY 12180

May 2014 - Dec 2015

COMPUTER AIDED MANUFACTURING TEACHING ASSISTANT

- · Responsible for checking and running machine code on a Haas VF-2 and MiniMill machine centers
- · Taught students:
  - Feeds, speeds, fixturing techniques and GD&T practices
  - How to read and write G-code by hand
  - How to program tool paths using MasterCAM

# **Projects**

## MasksOn PPE non-profit (https://maskson.org/) MANUFACTURING & DESIGN LEAD

Boston, MA March 2020 - September 2020

· Lead design reviews to ensure a safe and reliable product from ideation to production in three weeks

- · Enforced responsible PDM practices early for ease of traceability in medical board reviews
- Fulfilled early demand with surgical-grade 3D printed SLA-parts while working with injection mold supplier
- · Established and fortified supply chain to scale from 500 to 1500 manufactured units per day
- Designed and implemented final assembly test fixtures to ensure safety of units
- · Transitioned product from design to manufacturing in Haverhill, MA factory utilizing the principles of Lean Six Sigma

# RPI Formula SAE (http://www.formularpi.org/)

Troy, NY

September 2012 - December 2015

CHASSIS, SUSPENSION AND AERODYNAMIC TEAM: LEAD PROJECT MANAGER

- Responsible for quality of parts and timely completion of projects
- · Led design reviews to help younger members improve DFM & DFA and improve design efficiency
- · Led competition manufacturing utilizing additive processes when possible for strong and fast parts
- Ensured supplies and materials were in stock
- Managed sponsor and supplier relations

### SUBSYSTEM LEAD DESIGNER

- · Used 3D surfacing to design SLS-printed air intake with spline geometry, optimized internal flow utilizing CFD
- · Used FEA in design of complex geometry aluminum parts for CNC machining, utilized DFM & DFA methods
- Developed a wet layup molding process to create complex 3D geometry carbon fiber parts in house
- Designed, built and executed tests to produce, to validate or improve

## Mindful fidgets (https://www.mindfulfidgets.com/)

DESIGNER

November 2017 - June 2019

- Designed in CAD a wrist-mounted fidget spinner for special needs classrooms
- 3D printed prototypes on Formlabs Form 2 printer for fast design iteration
- Helped sourced shop that handled contract manufacturing, QA, packaging and shipping in Northern California