Jason **Gainor**

Industrial Engineer · Support Engineer · UX Designer

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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 — *110 8th Street, Troy, NY, 12180*

B.S. in Industrial & Management Engineering — *2011 - 2015*

Experience

Onshape — *121 Seaport Ave, Boston, MA*

Principle Product Engineer — *May 2018 - Present*

- 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 part metadata from legacy vaults to Onshape through REST API for Fortune 500 customers
- 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

Quality & 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 FDM & SLS printers and hobby 2.5D CNC router

Rensselaer Polytechnic Institute — *118 8th Street, Troy, NY 12180*

Computer Aided Manufacturing Teaching Assistant — *May 2014 - Dec 2015*

- 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

Northeast Conveyor — *Lima, NY*

Machinist & Assembler — *May 2015 - Aug 2015*

- Machined stainless steel parts on a manual 3 axis mill
- Assembled, manufactured, and planned install of production assembly conveyors in production environments

Harlan-McGee of North America — *Ballston Spa, NY*

Draftsman — *May 2014 - Nov 2014*

- Designed buildings and renovations to meet or exceed New York State Building Code using AutoCAD
- Communicated with suppliers and contractors to best satisfy customers

Projects

MasksOn PPE non-profit (https://maskson.org/) — *Boston, MA*

Manufacturing & Design Lead — *March 2020 - April 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
- Lead implementation of PPE unit assembly line in factory in Haverhill, MA
- 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*

Chassis, Suspension and Aerodynamic Team: Lead Project Manager — *September 2012 - December 2015*

- 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 tube chassis welding utilizing FDM-printed tube locating jigs
- 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