

Travis Libsack

Engineer interested in bringing my experience and drive to your company. With over six years of electro-mechanical prototyping experience, and two years of manufacturing leadership; my history delivering results will be an asset to your team.

Experience

Manufacturing Consultant – *Chartwell Consulting* *Boston, MA | 2018 – Present*

Implemented lasting change at multiple manufacturing sites by working with the factories' process engineers to understand technical manufacturing practices, identify constraints, provide insight, and solve challenging problems.

- **Delivered** step change improvement of +9.7% in efficiency, worth \$10M annually in a production-constrained batch polymer process by improving the heating and cooling efficiencies of the reactor
- **Reduced** chemical cost by \$500k, energy usage by 146 MWh, and chemical waste by 121T annually at a textile manufacturer by understanding, testing, and controlling variables in the dyeing process
- **Collaborated** with plant managers, R&D, operations, and corporate on all projects to drive change within manufacturing organizations

Design Engineer Intern – *Atlas Devices* *Boston, MA | Summer 2017*

Designed a new user interface on a battery-powered vertical rope access device.

- **Prototyped and engineered** user interface components for a new, low profile, mechanically-assisted vertical rope access device
- **Worked across disciplines** – from design to manufacturing to assembly – as part of the entire process behind making Atlas's key-stone product, a battery-powered vertical rope-access device

Co-Founder – *Limbeck Engineering LLC* *Freeport, ME | 2014 - Present*

Started a company with the mission of using engineering to solve today's ongoing problems. Continue to complete projects, write white-papers, and design solutions targeting these problems.

Designer | COVID-19 Ventilator | 2020 | [Final Report Link](#)

- **Developed** the electronics as a project lead on an open-source ventilator engineered for developing countries and emergency field hospitals

Electronics Lead | ClamClock | 2016-2017 | clamclock.com

- **Designed and tested** three iterations of the ClamClock Printed Circuit Board (PCB) using KiCAD and custom-made components before bringing the product to market
- **Funded** a Kickstarter project aimed at teaching kids about electronics, soldering, and programming; shipped over 50 ClamClocks around the world

Design Lead | RoboGoby | 2014-2016 | robogoby.blogspot.com

- **Coordinated** the design of two iterations of RoboGoby, an underwater submersible engineered to meet the needs of businesses and researchers in the Gulf of Maine

Education

Massachusetts Institute of Technology (MIT) *Cambridge, MA | 2014-2018*

Bachelor of Science in Mechanical Engineering, GPA: 4.6/5.0

Thesis: Underwater performance tracker - [Aquadio: Wearable Product Development](#)

Capstone: Search and Rescue (SAR) coordination device - [Coordinate: Rescue in Real Time](#)

Teaching Positions: Physics TA, Introduction to Making TA, Toy Product Design Mentor

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Leadership

- Methodology Trainer, Chartwell Consulting
- Engagement Leader, Chartwell Consulting
- Robotics Class Co-Director, MIT
- Eagle Scout, Boy Scouts of America

Skills

Competent

- Laser cutting, 3D printing, Rapid prototyping
- Benchtop metalworking and woodworking
- Microsoft Office Products (Excel & Access)

Proficient

- Soldering (reflow & SMD), manual/CNC mill & lathe
- Solidworks, OnShape, Fusion360, KiCAD, MasterCAM, Python, Linux/Unix systems

Experienced

- Design for manufacturing: injection molding, thermoforming, and silicone molding
- MATLAB

Projects

[Portfolio Link](#)

- COVID-19 ventilator
- Coordinate, SAR Device
- ClamClock, teaching kids about engineering
- Robogoby, underwater submersible
- MakeMIT First Place Team, 2015

Interests

- Home-lab server
- Weightlifting
- Camper Van-Build