Owen St. Germain

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Education

Boston University

Masters of Engineering in Systems Engineering **December 2024**
Engineering Graduate Scholarship Recipient, GPA: 3.75

Bachelor of Science in Mechanical Engineering **May 2023**
Presidential Scholarship Recipient, GPA: 3.71

Skills

- **Software:** SolidWorks, Fusion 360, Autodesk Inventor, Creo, 3DExperience, Matlab, Simulink/SimEvents, Python, GibbsCAM, Cura, nTopology, Full Microsoft Suite.
- **Manufacturing:** Instron tensile pullers, programmable CNC, 3D-Printer (DLP, FDM, and SLA), laser cutter, lathe, three axis mill, Keyence Profilometer, overmolding, casting.

Projects

Precision Optical Fiber Stripper Design | *Boston University - Masters*
- Lead a group of four students in a semester long project designing a machine to strip, cut, clean, and organize 50 micron diameter optical fiber. Utilized market research, sensor design, pneumatic design, and schedule planning.

Conveyor Belt Design | *OPT Industries*
- Lead a multi-staged industrial processing design project, involving multiple revisions, and a fixed budget. Used sheet metal design, chemically compatible, air flow/filtration, GD&T, modular design, and DFM.

Autonomous Two Part Assembly | *Boston University - Undergraduate*
- Worked on semester long design and manufacturing project to produce a two-part functional product without ever touching it. Worked with GibbsCAM, tolerance stacking, throughput/timing, robot arm control, and root cause analysis.

Experience

Fortify* | *Somerville, MA

Manufacturing Engineering Intern **June 2023 - August 2023**
- Characterized critical printer printer components, utilizing high precision measurement equipment.
- Worked with “end of production” printers to analyze prints using a profilometer to record critical feature characteristics.
- Produced detailed inventory review spreadsheet, documenting and resolving numerous database discrepancies.

Manufacturing Engineering Intern **June 2022 - August 2022**
- Modified and rewrote manufacturing procedures, emphasizing sensitive parts of the process critical to success.
- Managed and improved upon inventory organization systems, assisting in large company transition.

OPT Industries* | *Somerville, MA

Mechanical Engineering Intern **September 2020 - August 2021**
- Conducted an iterative research project involving fluid flow, computer vision and measure experimental design.
- Designed a tool to reduce downtime of printers during regular maintenance from several hours down to eight minutes.

Production Assistant **July 2020 - September 2020**
- Participated in design reviews of printers with engineering manager, resulting in promotion.