

# Emma Pines-Schwartz

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<https://eps-portfolio.weebly.com>

## WORK EXPERIENCE

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**SICdrone**, Boston, MA

March 2019 – June 2019

*Mechanical Engineer 1*

- Designing and modifying a variety of mechanical drone parts using SolidWorks with DFM in mind.
- Created molds for carbon fiber molding method.
- Responsible for the mechanical development of drone prototypes in a fast-paced, tight-knit, startup environment.

**Hydroid Inc.**, Bourne, MA

January – June 2018

*Mechanical Engineer Co-op*

- Modified and simplified a SolidWorks assembly for a reduced 3D printed 1/6<sup>th</sup> scale model of the “Sea Launcher” launch-and-recovery system for the Marketing Department to use at tradeshow.
- Updated weight and balance sheets, electronic chassis assemblies, and the full design layout for the new line of 6,000 meter rated Autonomous Underwater Vehicle.
- Designed parts on SolidWorks for rapid prototyping including a transducer guard and sticker guide for precise application.
- Performed FEA on multiple parts using SolidWorks Simulator to confirm the parts could withstand external forces.

**Northeastern University IT Services**, Boston, MA

April 2016 – October 2017

*Phone Support Analyst*

- Receive client calls (~ 250 total), troubleshoot problems, provide solutions for technical, A/V, software, and other technical issues, and create tickets as needed to support the entire faculty/staff/student population at the university.
- Conduct investigative troubleshooting for complex issues while collaborating with other staff members and teams.
- Promoted from InfoCommons Analyst within 3 months.

**PRO Unlimited at Sanofi Genzyme**, Framingham, MA

January – August 2017

*Process Equipment Engineer Co-op*

- Investigated, troubleshoot and implemented equipment related changes under GMP/GDP standards for Fabrazyme and Thyrogen Cell Culture manufacturing (i.e. Engineering change requests, functional equivalence forms).
- Worked closely with vendors to machine a new piping support and a tank modification and to clean rouge on manufacturing equipment.
- Wrote technical reports and memos for assessments, investigations, and proposals for ~ 10 projects.
- Developed knowledge of manufacturing parts to identify needs/specifications for replacements during mechanical failure and parts becoming obsolete resulting in reduction of production downtime.
- Utilized operational excellence tools with reliability engineering to assure equipment uptime.

**John Gilbert Associates LLC**, Braintree, MA

January – June 2016

*Naval Architect and Marine Engineer Co-op*

- Created AutoCAD drawings to fulfill design needs for 4 different commercial vessels for customer requirements.
- Learned to interpret and modify existing engineering design documentation (schematics, drawings, etc.)
- Calculated beams for size and material to be put onto vessels while keeping within federal guidelines.

## EDUCATION

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**Northeastern University**, Boston, MA

May 2019

Bachelor of Science in Mechanical Engineering

**Study Abroad:** The American College of Thessaloniki, Thessaloniki, Greece

Fall 2014

## COMPUTER APPLICATION SKILLS

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- SolidWorks (**CSWP Certified**), AutoCAD, Inventor, Microsoft Office, ANSYS

## CAPSTONE PROJECT

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**Video Game Controller for Double Amputee**, Northeastern University

July 2018 – December 2019

- Identified problem and gathered background information on existing foot operated devices and anthropometrics.
- Developed design requirements based off of clients wants/needs and background research.
- Used SolidWorks to design the shell of the controller using DFM/DFA and created a final controller after several iterations while troubleshooting problems along the way.
- Produced a fully functional final design for client and was awarded the “Most Technically Complete” Award.