

Benjamin Bernstein

Portfolio: <https://benbernstein.me>

Education

University of Pennsylvania, School of Engineering and Applied Science Philadelphia, PA
Master of Science in Engineering - Robotics May 2019
Bachelor of Science in Engineering - Mechanical Engineering May 2018

Skills

Hardware: Machining, CNC, injection molding, 3D printing, laser cutting, Arduino, PCB assembly
Software: SolidWorks, Altium, SolidCAM, MATLAB, MS Office. Familiar with Mastercam, COMSOL
Programming: G-code, Python, VBA, Bash, JavaScript & NodeJS, HTML, CSS. Familiar with C++.
Languages: Hebrew (proficient), Spanish (familiar)

Experience

Bresslergroup, Inc. Philadelphia, PA
Electro-mechanical Engineer July 2021 – Present
Mechanical Engineer July 2019 – June 2021

- Engaged in mechanical and electrical design of medical devices and consumer electronics products.
- Developed mechanisms and chose materials with manufacturability in mind.
- Performed dynamics simulations, stress FEA, and tolerance analysis to ensure reliability.
- Prototyped solutions with hands-on shop work and ran tests to validate concepts.
- Engaged in creative brainstorming sessions and worked with clients to achieve their goals.

LifeWatch Philadelphia, PA
Co-founder September 2017 – Present

- Designed, built, and tested a wearable epinephrine auto-injector (a.k.a. EpiPen).
- Filed utility patent application, received 1st place in multiple capstone design competitions, 3rd place in the BMEidea competition, and \$7,500 in total grants.
- Pursuing further development and partnering to bring the device to market.

Deeplocal, Inc. Sharpsburg, PA
Mechanical Engineering Intern May 2018 – August 2018

- Created complex mechanisms and custom machines for use in advertising campaigns by various tech companies.
- Communicated with clients to meet form and function requirements.
- Worked under tight deadlines as part of multi-disciplinary teams to develop concepts, prototype ideas, and deliver polished products to clients.

Axon Enterprise, Inc. (Formerly TASER International) Scottsdale, AZ
R&D Hardware Engineering Intern – Conducted Electrical Weapons June 2017 – August 2017

- Developed a component for TASER 7 training darts that utilizes injection molded and die cut parts.
- Designed and thoroughly tested multiple prototypes while participating in supplier visits and design reviews. Expected production of 200,000 parts annually.