

PATRICK BRANDON

PRODUCT ENGINEER

www.patrickbrandon.com | pbrandon0@gmail.com | (516)-528-9777

EDUCATION

UNIVERSITY OF PENNSYLVANIA – Philadelphia, Pennsylvania

Master of Science in Engineering; Integrated Product Design, May 2013

- Degree combining coursework from the School of Engineering, Design, and Wharton School of Business
- President of Integrated Product Design Graduate Student Association
- Member of the Wharton Design in Business Club and Running Club

JOHNS HOPKINS UNIVERSITY – Baltimore, Maryland

Bachelor of Science; Mechanical Engineering, May 2008

- Senior thesis focused on an unmanned submersible vehicle in collaboration with Northrop Grumman
- Captain of the Men's Varsity Track & Field and Cross Country Teams
- President of American Institute of Aeronautics and Astronautics (AIAA) student chapter

EXPERIENCE

OLIVE LABS – New York, New York

Co-Founder & Product Design Lead, 2013 - Present

- Drove the development of the initial concept for Olive, a wearable computing device that allows users to monitor and manage their stress levels while enabling personal habit change through intervention
- Grew and managed a multidisciplinary engineering team including electrical, mechanical, and software
- Developed and tested a custom electrical sensor suite capable of monitoring human stress response
- Created multiple product iterations while under strict cost and cosmetics consumer electronic constraints

BEACON & LIVELY – Philadelphia, Pennsylvania

Contract Product Engineer, 2013 - 2014

- Drove the development of Beacon, a wearable device that blends high fashion jewelry with technology
- Developed mechanical designs, PCB layout, embedded code, and identified manufacturers
- Created hardware demonstrations, in coordination with software developers, used for investor pitches

ITT CORPORATION, ANTENNA PRODUCTS AND TECHNOLOGIES – Islip, New York

Mechanical Engineer II, 2008 - 2011

- Managed numerous prototype and production volume builds of military and aerospace grade products while linking cross functional engineering teams and product management
- Experienced with design, manufacturing, and rapid prototyping utilizing metals, plastics, and composites
- Performed system and sub-system mechanical design, thermal analysis, and vibration/shock analysis
- Reduced production time of heritage products by up to 20% by implementing ultra violet cure adhesives
- Authored Military Standard test reports and conducted qualification and acceptance testing

JOHNS HOPKINS UNIVERSITY – Baltimore, Maryland

Research Assistant - System Development and Deployment, 2007 - 2008

- Prepared and tested various experimental apparatus within a laboratory environment
- Measured sea currents during a two week oceanic research trip using particle image velocimetry
- Developed and deployed Matlab code for real time visualization of experimental data

SKILLS

CAD: SolidWorks, Pro-E, NX, Altium, Eagle

ANALYSIS: Ansys, Pro-E

CODING: Matlab, Embedded C/C++, Arduino

DESIGN SOFTWARE: Adobe Creative Suite

RAPID PROTOTYPING: 3D printing, CAM, Laser cutting

DESIGN FOR MANUFACTURING: GD&T, Multi-volume

USER BASED DESIGN: Need-finding, Design-thinking

LEADERSHIP: Program and project management