Hilary Anna Johnson

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EDUCATION

2011-2015 **THAYER SCHOOL OF ENGINEERING** Hanover, NH

Bachelor of Engineering, Mechanical Concentration | 3.38 GPA

Fundamentals of Engineering (FE) Exam Certificate, SolidWorks Professional Certificate

Coursework: Computer-Aided Mechanical Engineering Design, Machine Engineering, Microprocessors, Structural Analysis, Statistics, Energy Utilization, Engineering Design Methodology, Differential Equations

2011-2015 **DARTMOUTH COLLEGE** Hanover, NH

Bachelor of Arts, Engineering Sciences | 3.28 GPA

Coursework: Product Design, Solid Mechanics, Systems, Digital Electronics, Linear Algebra, Intro to CS Development Economics, International Development, History of Modern Healthcare, Human Biology

2009-2011 **UNITED WORLD COLLEGE IN MOSTAR** Mostar, Bosnia and Herzegovina

International Baccalaureate Diploma, *June 2011*

EXPERIENCE

July 2015 - Present **Thayer School of Engineering** Hanover, NH

Design Fellow

- Collaborating with professors on 5 fall term, design oriented courses & 3 workshops
- Advising 4 student teams on design projects, working with students on challenges daily
- Finessing production/prototyping techniques through creative projects in the shop
- Initiating project to develop wearable sensors for cardiac impedance sensing
- Developed and taught human centered design course for Ghanaian teenage girls partnered with a local NGO. Funded by $10,000 Davis Projects for Peace grant.

June-Aug 2014 **Insight Product Development LLC** Chicago, IL

Engineering and Design Intern

- Developed electromechanical architecture for a next generation bench top laboratory diagnostic device, applied top-down CAD modeling techniques
- Contributed to design of four early stage medical device prototypes in the lab
- Conducted DFMA analysis for injection molded parts and developed product confidence testing based on client specifications

Aug 2013-present **Eleazar Wheelock Society** Hanover, NH

Student Director and Board Member

- Managed $110,000 annual budget, and hired administrator for operations
- Directed core initiatives, alumni relations, and talent development
- Organized the 2014 & 2015 Wheelock Conference, delivered opening address
- Coordinated 11 panels, 30 panelists, and 400 faculty, alumni and student attendees

Feb-May 2014 **Dartmouth Institute for Security Technology and Society** Hanover, NH

Product and Interaction Designer, Amulet Project

- Designed UI/UX for mHealth device as a hub for body-area sensor networks
- Prototyped wearable wristband using 3D printing and injection molding

Sept 2012-June 2013 **Dartmouth Biomedical Engineering Center** Hanover, NH

Research Assistant

- Conducted materials research on the oxidation pathway of polyethylene

Summers 2011 & 2012 **Red Dog Camp** Bristol Bay, AK

Commercial Salmon Fisher

- Worked as a set-net crew-hand during 16 hour work days
- Designed & completed mechanical projects on land: renovated old bunkhouse, wind-turbine water pump and grey water filtration system

SKILLS

- **Applications:** Certified SolidWorks Professional including competency in mold tools, surfacing, sheet metal and simulations, Pro-E, SketchUp, Photoshop, Microsoft Office Suite
- **Production:** CNC milling, injection molding, mill, lathe, 3D printing, laser cutting, MIG welding
- **Programming:** C, C++, Matlab, Processing, Arduino, Assembly
- **Languages:** conversational Spanish, basic Serbo-Croatian

I love romping outdoors, mountaineering, reading, swing dancing, improv, working on teams & exploring new cultures.