

# Jack Cian Boland

309 W. Washington Ave. Apt. 806  
Madison, WI 53703

jcboland91@gmail.com  
781.534.8521

338 Main Street  
Hingham, MA 02043

Portfolio: <http://www.bolandcommajack.com>

<b>Objective</b>	<i>To obtain a full-time position involving either mechanical engineering and/or product design.</i>
<b>Education</b>	<b>University of Wisconsin-Madison</b> <b>B.S. Mechanical Engineering</b> , May 2013 Certificate in Integrated Studies in Science, Engineering, and Society with a focus in Design
<b>Engineering Design Projects</b>	Developed, designed and prototyped a water pumping and filtering bicycle adapter for communities in underdeveloped countries with fellow engineering student; Fall 2011-Spring 2012  Implemented a biosand filter design in the Lalo Loor Reserve or rural, coastal Ecuador in January of 2013 as part of an independent project to help introduce people to methods of cleaning water; Spring 2012-Fall 2013  Executive Board member of <b>Engineers Without Borders</b> , with focus on designing, prototyping and testing a latex concrete roof segment for implementation in a community in Bayonnais, Haiti; Fall 2009–Spring 2013
<b>Honors, Awards and Competitions</b>	<ul style="list-style-type: none"><li>• Frontier Fellow; Wisconsin Institute for Discovery; Spring 2013</li><li>• Global Steward’s Sustainability Prize competition; Spring 2012; GRAND PRIZE (Awarded \$17,000)</li><li>• CleanTech Open 2012; SEMI-FINALIST</li><li>• Wiscontreprenuer 100 Hour Challenge; Spring 2012; FINALIST</li><li>• Global Steward’s Sustainability Prize; Spring 2013; FINALIST</li><li>• Dean’s Honor List; Fall 2009 &amp; Fall 2013</li></ul>
<b>Work Experience and Research</b>	<b>Design Concepts</b> Madison, Wisconsin, <i>Mechanical Engineer</i> , Sept. 2013 - Current <ul style="list-style-type: none"><li>• Contributed to projects at various stages of product development from concept generation, research, prototyping, validation and testing, and implementation.</li><li>• Worked on a wide array of projects spanning medical devices for heart valve repair to consumer appliances to insect repellents targeted towards emerging economies.</li><li>• Identified requirements and parameters for success of products through direct communication with client as well as consumer research.</li></ul> <b>Otherlab</b> San Francisco, California, <i>Intern/Junior Engineer</i> , June-Aug 2012 <ul style="list-style-type: none"><li>• Worked both independently, and in collaboration, on various engineering projects ranging from an electric hydrofoil to inflatable car prototypes for automotive company.</li><li>• Redesigned, tested and fabricated components for an electric hybrid cargo tricycle using CAD and a wide variety of prototyping tools, such as laser and water-jet cutters.</li></ul> <b>Frontier Fellow &amp; Undergraduate Intern</b> <i>Wisconsin Institute for Discovery</i> , Sept. 2012 - Aug. 2013 <ul style="list-style-type: none"><li>• Independent research project focused on developing a mechatronic apparatus for physically rendering data streams and environment interaction, using computer controls, microcontrollers and CAD.</li><li>• Designing and creating devices for horticulture based projects in a new Art/Optimization collaboration lab.</li></ul> <b>University of Wisconsin Engineering Department</b> , Madison, Wisconsin, <i>Peer Advisor</i> , June-Aug 2011 <ul style="list-style-type: none"><li>• Informed upwards of 1000 incoming engineering students during orientation with information to help acclimate them to the engineering campus, curriculum, scheduling program, and other College of Engineering resources.</li><li>• Assessed students’ transcripts and advised students one-on-one and in small group meetings regarding course registration decisions. Addressed placement and other individual problems.</li></ul> <b>Jack and John’s Slush (Co-Owner)</b> Hingham, MA, May-Aug. 2009; May– Aug. 2010 <ul style="list-style-type: none"><li>• Developed a licensed and successful small business selling Italian Ice, profiting over \$3000.00 in the first 4 months, with an increased net income in our second year. Acquired and operated two ice cream carts in addition to creating multiple marketing tools.</li></ul>
<b>Leadership</b>	<b>Engineers Without Borders</b> <i>Financial Manager</i> May 2011 - May 2013 <ul style="list-style-type: none"><li>• Manage and oversee all of the financial transactions and records of projects in Haiti, El Salvador, Kenya, Rwanda, and Wisconsin (and more recently, Tanzania and Guatemala) for the Engineers Without Borders UW Madison Chapter, with monetary assets exceeding \$75,000.</li></ul>
<b>Other Skills</b>	<ul style="list-style-type: none"><li>• Certified and experienced working in a machine shop, including multiple prototyping and CNC machines including laser cutting, water jet cutting and Fused Deposition Modeling</li><li>• Experience with Programming (Java, Python, HTML/CSS, C, Processing, Matlab), Arduino/Atmel Micro-controllers, CAD (NX 7.5, Autodesk Inventor, Solidworks), Adobe Photoshop, Dreamweaver, Illustrator, and Microsoft Office</li></ul>
<b>Personal Interests</b>	Rock climbing, mountain/road biking, learning new instruments, making things, and creating art.