

# Brian Benson

[bbenson@wpi.edu](mailto:bbenson@wpi.edu) | Cell: 978-895-0889 | 81 Elmwood Road Winchendon, MA, 01475

---

OBJECTIVE:	To obtain a full time position as a Mechanical Design Engineer.	
------------	---	--

---

EDUCATION:	<b>Worcester Polytechnic Institute, Worcester MA</b>	Expected May 2011
	Masters of Science in Mechanical Engineering, GPA: 3.6 Thesis: Design and Realization of a Rapid Kinetic Energy Transmission Mechanism	
	<b>Worcester Polytechnic Institute, Worcester MA</b>	May 2009
	Bachelor of Science in Mechanical Engineering, Concentration in Robotics Graduated with Distinction, GPA: 3.4	
	<b>Massachusetts Academy of Math and Science, Worcester MA</b>	May 2006

---

EXPERIENCE:	<b>Teachers Assistant; Worcester Polytechnic Institute; Worcester, MA.</b>	August 2009-Present
	<ul style="list-style-type: none"><li>Responsible for assisting students, proctoring labs, and grading coursework for Robotics Engineering classes including: Introduction to Robotics, Unified Robotics I &amp; II, and Industrial Robotics.</li></ul>	
	<b>Mechanical Engineering Intern; iRobot Corporation; Bedford, MA</b>	2010
	<ul style="list-style-type: none"><li>Tasked with characterizing performance and lifespan variables on the Small Unmanned Ground Vehicle (SUGV) drive tracks to aid in design improvements, with the goal of increasing track lifespan in a highly constrained solution space.</li><li>Developed and implemented LabVIEW automated tests to study relevant design parameters.</li><li>Utilized test results, Mathcad, Excel, and Pro/E to provide a viable set of solution strategies to be implemented and verified.</li></ul>	
	<b>Mechanical Engineering Intern; iRobot Corporation; Bedford, MA</b>	2009
	<ul style="list-style-type: none"><li>Responsible for development and implementation of onsite RAM (reliability, availability, and maintainability) testing for the SUGV system.</li><li>Played critical role in discovery, debugging, and solution verification of significant issues discovered in RAM testing.</li><li>Worked with the engineering team to track, maintain, and allocate robots.</li></ul>	
	<b>Mechanical Engineering Intern; iRobot Corporation; Bedford, MA</b>	2008
	<ul style="list-style-type: none"><li>Machined prototypes and performed reworks on complex assemblies.</li><li>Assembled SUGV robotic systems and subsystems.</li><li>Developed and implemented a chassis leak test experiment for baseline purposes.</li><li>Provided technical field support for Army testing at White Sands Missile Range in New Mexico.</li></ul>	
	<b>Technical Author; Servo Magazine; North Hollywood, CA</b>	2006-Present
	<ul style="list-style-type: none"><li>Published twelve articles on the subject of robotics.</li></ul>	
	<b>Photographer and Owner; Benson Photography and Video; Winchendon, MA,</b>	2004-Present
	<ul style="list-style-type: none"><li>Established a photography and video business. See <a href="http://www.BensonPV.com">www.BensonPV.com</a></li></ul>	

---

PROJECT WORK:	<b>Major Qualifying Project; Worcester Polytechnic Institute; Worcester, MA</b>	2008-2009
	<ul style="list-style-type: none"><li>Developed the first sand-swimming biomimetic self-contained scalable robotic snake to better understand locomotion through granular media.</li><li>Received Provost's MQP Award (Best MQP) in Robotics Department</li><li>Received Honorable Mention for project in Mechanical Engineering Department</li></ul>	
	<b>Interactive Qualifying Project; Worcester Polytechnic Institute; Worcester, MA</b>	2007-2008
	<ul style="list-style-type: none"><li>Developed an instructional video on composting methods for residents of San Jose, Costa Rica.</li></ul>	

---

ACTIVITIES:	<b>Robotic Combat Competitor</b>	2001- Present
	<ul style="list-style-type: none"><li>Designed and manufactured 15 combat robots ranging from 11b-220lbs. <a href="http://www.Benson-Labs.com">www.Benson-Labs.com</a></li><li>Have attended 40 competitions and won over 30 awards. Internationally ranked.</li></ul>	
	<b>Eagle Scout - Boy Scouts of America</b>	1998-Present
	<ul style="list-style-type: none"><li>Order of the Arrow: Brotherhood Member</li></ul>	
	<b>Alpha Phi Omega</b>	2006-Present
	<ul style="list-style-type: none"><li>Co-ed Community Service Based Fraternity</li></ul>	

## Brian Benson

[bbenson@wpi.edu](mailto:bbenson@wpi.edu) | Cell: 978-895-0889 | 81 Elmwood Road Winchendon, MA, 01475

- |  |           |
|--|-----------|
| <b>WPI Student Government Association</b>                    | 2008      |
| • Honorary Senator   |           |
| <b>Habitat for Humanity</b>                                  | 2004-2009 |
| • Volunteered to help build homes for low-income families    |           |
| <b>WPI Savage Soccer Robotics Competition Mentor</b>         | 2006-2008 |
| • High School Robotics Competition based on the Vex platform |           |
- 

### SKILLS:

- |  |            |
|--|------------|
| <b>Passed NCEES Fundamentals of Engineering Exam</b>   | April 2009 |
| <b>Software</b>  |            |
| • SolidWorks, Pro/E, LabVIEW, Mathcad, MATLAB, Microsoft Office, Adobe Photoshop   |            |
| <b>Fabrication</b>   |            |
| • WPI Qualified Lab User: Manual and CNC mill, manual lathe, drill press, sandblaster, MIG welder, sheet metal brake and shear, machine setup, hand tools. |            |
- 

### TRAINING:

- |   |                |
|---|----------------|
| <b>Junior Leader Training Conference</b>                                  | 2003           |
| • Week long training through the Boy Scouts of America                    |                |
| <b>National Order of the Arrow Conference</b>                             | 2002,2004,2006 |
| • International Conference focused on leadership development and training |                |