

## **GARRETT ROBERT HERNING**

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Berlin, NJ 08009

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### **BACKGROUND SUMMARY:**

A mature, motivated engineer with a good understanding of mechanical and electrical systems and how they interact in modern design. Has a keen familiarity with many current automotive technologies and trends. Excellent team player that is detail oriented, flexible and has exceptional written and verbal communication skills. Working towards a career in the automotive aftermarket, particularly in performance, custom and alternative automotive designs. Enjoys travel and working with customers.

### **PROFESSIONAL EXPERIENCE:**

- Zoom Technology, Inc.; Mount Holly, NJ** **2002-2008**  
Project Engineer
- Designed and field-tested a new microprocessor based service product.
  - Oversaw and managed the professional services of an embedded design consulting company. These services included the electronic design, firmware development and application software for an update to Zoom Technology's TranX 2000. Additionally responsible for review of all documentation and deliverables on the project as well as making the update ready for release to customer base.
  - Designed various hydraulic test fixtures for late model automatic transmission valve bodies. The test fixtures allow complete testing of the valve body on Zoom Technology's VBT 4000 hydraulic test machine.
  - Designed mechanical, hydraulic and electronic hardware, data acquisition and processing software for high volume, end of line test equipment in use at a number of automotive component remanufacturing facilities.
  - Design of computer software used for testing and control of automatic transmission components for several different standard test systems.
  - Creation of technical manuals, documentation and end user manuals.
  - Design, layout and generate artwork for a variety of circuit boards.
  - Field installation of equipment and systems along with customer training.
  - Customer technical support.
  - Worked with Sales Department to demonstrate test equipment and field technical questions during trade shows.
- AutoTronix, LLC; Berlin, NJ** **2005-2008**  
Partner in Consulting Company
- Manage consulting jobs and company operations.
  - Designed and fabricated a custom engine dynamometer. Dynamometer was used to test claims of US patent 6237579 for a customer using a number of unique test methods.  
(See <http://www.herningg.com/singh/>)
- S&S Cycle; Viola WI** **1998-2000**  
Cooperative Education (Engineer Training)
- Design, assembly and testing of sensor assemblies and wire harnesses for an in house developed electronic ignition system.
  - Investigated and 3D modeled alternative V-twin engine designs.
- R.J. Bartell & Associates, LLC; Green Bay, WI** **1994-1999**  
CAD Drafting & Design
- Organization of Master CAD files and assembly design for automotive transmission dynamometers.

## **EDUCATION:**

- University of Wisconsin Platteville – Platteville, WI December 2001  
Bachelor of Science – Mechanical Engineering  
 Emphasis in internal combustion engine design and computer aided design  
Bachelor of Science – Electrical Engineering  
 Emphasis in computer architecture, digital design and microprocessor systems interface
- National Instruments Technical Training September 2002  
 LabView Basics I & II Training Courses
- Microchip Technical Training July 2005  
 Microchip Masters 2005 Training Course
- Society of Automotive Engineers Professional Development Program April 2006  
 Fundamentals of Modern Vehicle Transmissions Technical Course (1.80 CEU)

## **TECHNICAL EXPERTISE:**

- Familiar with Microchip MPLAB IDE, Microchip development tools and assembly programming
- Proficient with National Instruments LabVIEW 6/7
- Proficient with AutoCAD 2006
- Proficient with Protel 99SE and PCB artwork generation
- Familiar with Inventor 4/7
- Familiar with fabrication operations and equipment (mills, saws, lathes and welding) and competent in operation of said machinery.
- Familiar with electrical operations (soldering, cable crimping, PC board assembly and repair) and competent in performing said tasks.

## **PROFESSIONAL AFFILIATIONS / LEADERSHIP EXPERIENCE:**

- American Society of Mechanical Engineers (ASME) 2000-2008  
 ASME ECLIPSE (Early Career Leadership Intern Program to Serve Engineering) Intern (2008-09)  
 Co-founder & Co-chair of Philadelphia Young Engineers (2005-08)  
 Active member in local section
- Society of Automotive Engineers (SAE) 2001-2008  
 Active member in local section
- Toastmasters International 2005-2008  
 Vice President Education, Camden County NJ (2007-2008 calendar year)  
 Vice President of Public Relations, Camden County NJ (2006-2007 calendar year)  
 Completion of CC (Competent Communicator) certification May 2007
- Denmark International Study Program 2000-2008  
 Alumni of DIS Program

## **OTHER INTERESTS:**

- Automotive Enthusiast  
 Enjoys automotive restoration and performance modification.
- Personal WebPages  
 [www.herningg.com](http://www.herningg.com)
- Amateur Guitar Player