

# JUSTIN MCHENRY

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An innovation oriented **Electrical Engineer** with focus and training in **EMC/EMI, programming**, photonics, optics, remote sensing, design, and laser technology with outstanding logic, problem solving, and spatial visualization skills.

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## SUMMARY OF QUALIFICATIONS

- Talented and devoted to quality assurance and building effective team relationships with strong leadership skills.
  - Conduct meticulous system analyses and reports utilizing local and external development of system performance tools and assist numerous departments in program interface and quality service.
  - Extraordinary capacity to guide projects, motivate and instruct diverse teams to achieve common goals and objectives.
  - Aptitude to identify, develop and implement technical program issues, and establish projections of required resources.
  - Adept at planning and execution of activities while maximizing return within program budget, performance, and time constraints.
  - Passionate, well rounded individual with goals and dreams inside and outside of the workplace and a desire to maintain a healthy, successful lifestyle.
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## EDUCATION AND TRAINING

### BACHELOR OF SCIENCE

2007

MICHIGAN TECHNOLOGICAL UNIVERSITY

Houghton, MI

Area of Study: Electrical Engineering, Photonics Concentration

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## PROFESSIONAL EXPERIENCE

### EMC TEST ENGINEER

January 2008 - Present

TUV SUD AMERICA

Plymouth, MI

- Testing of automotive electronics to ensure equipment meets EMC specifications.
- Experience with many specifications: CISPR 25, SAE, ISO, EC, GMW, Ford, Honda, Toyota, Renault, Peugeot, John Deere, VW, Volvo, Mitsubishi, and Nissan, among others.
- Various testing of Radiated/Conducted Emissions and Radiated/Conducted Immunity via Semi-Anechoic Chamber, Reverberation Tuning, Bulk Current Injection, TEM Cell, Transients, Magnetic Field Immunity and other methods.
- Other testing includes ESD, voltage variation simulations and voltage stress, among others.
- Designing and writing programs for data processing and for test automation, saving countless hours that would otherwise be wasted on repetitive tasks.
- Writing test procedures for employee reference.
- Working directly with customers testing and developing their product.
- Managing and processing performance history data records.
- Calibrating and characterizing test equipment.

### EMC OF AUTOMOTIVE ELECTRONICS (SENIOR DESIGN)

Fall 2006 - Spring 2007

JOHNSON CONTROLS, INC.: MICHIGAN TECHNOLOGICAL UNIVERSITY

Houghton, MI

- Senior design team project.
- Design of an automotive circuit to meet automotive EMC (Electromagnetic Compatibility) specifications.
- Runner-up best senior design presentation (by a margin of one vote).

- Personal design yielded best emissions results in group.
- Personal responsibilities included: building a LISN, design of a SMPS layout, constructing five PCBs, conduction of various tests of SMPS performance, post-processing results, stocking of parts and building a ground plane.

**WAREHOUSE CLERK**  
MEIJER, INC.

July 2004 - January 2008  
Lansing, MI

- Monitor load quality, while completing training for new employees, reporting problems to supervisor as well as progressing lanes which are behind and other assigned duties.
- Effectively trained more than 20 employees in facilitating proper warehouse functions.
- Proficient at operating machinery such as Hilos and Front-riders.

**GENERAL LABOR**  
MICHIGAN STATE HORTICULTURE FARM

July 2003 - August 2003  
Holt, MI

- Assisted with harvesting and labor in the fields to promote a profitable venture.
- Responsible for equipment preventative maintenance.

**ADDITIONAL WORK EXPERIENCE**

- Sales Rep., Menards, Grand Ledge, MI, May 2002 - August 2002.
- Assistant, Gleason Portrait Gallery, Bath, MI, 1999 - 2002.

**TECHNICAL SKILLS**

- PROGRAMMING: LabView, VB/VBA, Java, MATLAB, some C++
- HARDWARE: CAN, LIN, GPIB, National Instruments, Agilent, and HP equipment, Dewetron acquisition systems, MI Scientific, various signal generators, various receivers/spectrum analyzers, EM Test equipment, Kikusui equipment, Teseq equipment
- CAD/DESIGN: Eagle, PSpice, 3Ds MAX 9, Photoshop, AutoCAD 2008
- EMC SOFTWARE: Nexio BAT/EMC, EMC32, IVD
- WEB: HTML, PHP and AJAX, SQL
- OTHER SKILLS: Advanced data processing skills, ability to excel in a fast paced technical environment, working and communicating with customers from many countries, comprehension of technical specifications and test plans, rapidly organizing and performing tests