# Bradley D. Farnsworth

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*Education:* ***Case Western Reserve University***, Cleveland, Ohio
M.S., Electrical Engineering, 2009 (anticipated), *GPA: 4.0*
B.S., Electrical Engineering, May 2006, *Summa cum Laude, GPA: 4.0*, Japanese minor

*Experience:* ***Team Case, 2007 DARPA Urban Challenge,*** Cleveland, Ohio
2006 – 2007 *Sensor tech lead*

- Specified, setup, and maintained sensors, electrical systems, and computer systems on DEXTER, an autonomous robotic vehicle.
- Developed a SICK LIDAR driver with object detection and feature extraction in LabView.
- Organized team resources for successful completion and integration of sensing systems.

***Advanced Platform Technology (APT) Center, Cleveland VA Medical Center,*** Cleveland, Ohio
2005 – Present *Research assistant, Case Wireless Microsystems Laboratory*

- Designed a wireless, fully implantable sensing microsystem for control of a powered prosthetic leg.
- Designed an RF near-field wireless power and passive data telemetry link.
- Designed a low-power, low-noise analog differential front-end amplifier.
- Fabricated an integrated circuit in the AMI 1.5 μm CMOS process.
- Performed lab bench functional testing and device characterization.

***Sonnet Technologies, Inc.,*** Irvine, California
Summer 2004 *Electrical engineering intern*

- Developed hardware upgrades and accessories for Apple computers and iPods.
- Systematically tested new products for compatibility and reliability.

***Apple, Inc.,*** Cleveland, Ohio
2004 – 2005 *Apple campus representative at Case Western Reserve University*

- Represented Apple at Case by providing technical support and securing new sales accounts.
- Increased Apple's visibility at Case through information sessions and user group meetings.

*Proficiencies:* Analog IC Design, Sensors and Instrumentation, Autonomous Robotics, MEMS for Sensing and Communication, CMOS Fabrication Technology, Signal Processing, Communication Systems, Neural Interfaces, Digital Image Processing, Hybrid Systems, Object-Oriented Programming.

*Skills:* SPICE, L-Edit, LabView, C++, MATLAB, ExpressPCB, Mathematica, Office, Cadence, Protel DXP, Photoshop, and other tools. Experienced with various electronic lab test equipment.

*Honors:* Department of Electrical Engineering and Computer Science Chairman's Award, 2006
Case Alumni Association Prize for Achievement, 2006
Association for Computing Machinery Award, 2006
Case Dean's High Honors List, 2002 – 2006
Apple Student Developer Scholarship 2005, 2006, and 2007
Tau Beta Pi Engineering Honor Society – Ohio Alpha Chapter member

*Leadership:* IEEE Student Member (CAS, EMBS, SSCS), Case IEEE Graduate Student Representative
Ohio Society of Professional Engineers member and Ohio Engineering Intern
Teaching Assistant, ENGR 210 (Introduction to Circuits and Instrumentation), Summer 2007
Case Department of Electrical Engineering Curriculum Committee member, 2006
SIGMAC (Case Macintosh Users Group) President, 2004-2006