

**Preferred Address:**

Room 36-696  
 77 Massachusetts Avenue  
 Cambridge, MA 02139-4307  
 (617) 324-4081[tel] (617) 452-3200 [fax]

**Daniel Weller**

Email: dweller@mit.edu  
 Web: http://www.mit.edu/~dweller/

**Alternate Address:**

70 Pacific Street, Apt #503B  
 Cambridge, MA 02139

**OBJECTIVE**

To pursue research and development in the area of signal processing.

**EDUCATION**

**Massachusetts Institute of Technology**, Cambridge, MA

Ph.D. in Electrical Engineering,

expected June 2012

S.M. in Electrical Engineering,

expected June 2008

GPA 5.00/5.00

**Carnegie Mellon University**, Pittsburgh, PA

B.S. in Electrical and Computer Engineering (ECE),

May 2006

GPA 3.97/4.00

**TECHNICAL SKILLS**

**Programming Languages:** MATLAB/Simulink, C/C++, Java, assembly; Verilog and VHDL

**Platforms:** Linux/UNIX, Microsoft Windows, Mac OS X; PC, embedded, DSP, ASIC

**EXPERIENCE**

**MASSACHUSETTS INSTITUTE OF TECHNOLOGY**, Cambridge, MA

**Research Assistant**

September 2006 – Present

- Developing novel algorithms for jitter compensation in analog-to-digital converters (ADCs)

**TEXAS INSTRUMENTS**, Dallas, TX

**Engineering Co-Op, Video & Image Processing Laboratory**

June 2007 – August 2007

- Implemented a novel video frame rate conversion algorithm for hardware.

**APPLE COMPUTER**, Cupertino, CA

**Engineering Intern**

June 2006 – August 2006

- Applied signal processing methods to classify computer programs based on their power consumption profiles

**CARNEGIE MELLON, General Motors Collaborative Research Lab**

August 2005 – May 2006;

**Research Assistant, Vehicular Ad-Hoc Wireless Network Project**

May 2004 – May 2005

- Developed and demonstrated software in C and C++ to simulate routing protocols for vehicular networks

**ALLIANT TECHSYSTEMS (ATK), Ordnance Systems**, Plymouth, MN

**Engineering Intern**

May 2005 – August 2005

- Worked on project teams while analyzing data, programming microcontrollers, and writing simulation software

**ACADEMIC PROJECTS**

**Bioimaging, Carnegie Mellon**

Spring 2006

- Worked with a partner to design software for the early detection of acute post-transplant cardiac rejection

**Digital Communication and Signal Processing Design, Carnegie Mellon**

Fall 2005

- Designed and demonstrated, in a group of three, a counterfeiting deterrence system as a capstone project

**Embedded Real-Time Systems, Carnegie Mellon**

Fall 2005

- Developed, in a team of three, several embedded systems, including a real-time operating system

**OTHER COURSES**

Transmission of Information \*

Algorithms for Estimation and Inference

Analysis I

Inference and Information

Discrete-Time Signal Processing

Fundamentals of Probability

Honors Research Project \*\*

\* Spring 2008 \*\* Carnegie Mellon

**PUBLICATIONS**

Mangharam, R., Weller, D. S., et. al. "GrooveNet: A Hybrid Simulator for Vehicle-to-Vehicle Networks (Invited Paper)." *Proceedings of the 2nd International Workshop on Vehicle-to-Vehicle Communications*. San Jose, CA, USA, July 2006.

Mangharam, R., Weller, D. S., et. al. "GrooveSim: A Topography-Accurate Simulator for Geographic Routing in Vehicular Networks." *Proceedings of the 2nd ACM International Workshop on Vehicular Ad hoc Networks*. Cologne, Germany, September 2005.

**LEADERSHIP**

**Sidney-Pacific House Government, MIT**

Spring 2007 – present

- Working with other officers to organize social and cultural programs for community residents

**EECS Graduate Student Association, MIT**

Fall 2006 – January 2008

- Collaborating with other EECS graduate students to organize department-wide events and programs

**6.Insight (the EECS Seminar Series), MIT**

Fall 2006 – Spring 2007

- Coordinated a student-run series of seminars by MIT graduate students about cutting-edge research in EECS

**Graduate Student Council, MIT**

Fall 2006 – Spring 2007

- Represented EECS graduate students at council meetings and in initiatives to enrich graduate student life

**ECE Student Advisory Committee, Carnegie Mellon**

Fall 2005 – Spring 2006

- Worked with other students and administrators to improve the department and run its first ECE Day event

**Student Dormitory Council, Carnegie Mellon**

Spring 2004 – May 2006

- Held positions of Secretary/Treasurer and Housing and Student Life Committee Chair in student organization

**HONORS &  
AWARDS**

NDSEG Fellowship	awarded Spring 2007
NSF Fellowship	awarded Spring 2007
Finalist, Hertz Foundation Graduate Fellowship	Spring 2007
University Honors and College Honors, Carnegie Mellon	May 2006
<b>Meeting of the Minds, Carnegie Mellon</b>	May 2006
<i>First Place</i> Sixth Annual Lockheed Martin/Eta Kappa Nu/ECE Project Awards	
<i>Third Place</i> CIT Honors Poster Competition	
<i>Honorable Mention</i> Sigma Xi Poster Competition	
Carnegie Mellon (Carnegie Institute of Technology) Dean's List, All Semesters	Fall 2003 – Spring 2006
Member, Eta Kappa Nu and Tau Beta Pi	