

david\_ramsay@bose.com  
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# DAVID RAMSAY

*2011~now, Bose Corporation*  
*2010 Systems/Electrical Engineer*

*2 years in Audio Applied Research as a Systems Engineer:*

-Design, construct, and tune complex audio prototypes for Home Entertainment applications. Current work focuses on advanced limiting schemes, equalization, speaker spatialization array topologies, and critical listening/evaluation skills.

-Designed, implemented, and tested a microphone array using self-implemented speech intelligibility standards; gained familiarity with audio measurement techniques and real-time processing. (*internship*)

*Selected for Highly Competitive PACE rotation program:*

-6 months in Noise Reduction Technology's Advanced Development Group. Designed and tested perceptually based noise management algorithms in Matlab, objective-C.

-6 months in Automotive Systems' Electrical Engineering Group. Tested board layouts and worked on embedded/analog circuit design.

*2010-2011 Fulbright Researcher*  
*Dublin Institute of Technology*

Developed and prototyped a DSP (SHARC) based system to allow handicapped musicians to play guitar using real-time feature extraction and pitch shifting; Matlab and C programming, Microchip/ADI hardware.

*2009 General Electric Co.*  
*Co-op at GE Energy*

*2003-2008 Nat'l Institutes of Health,*  
*U.S. Naval Research Lab*  
*Various Internships*

## *Skills and Interests*

Advanced Matlab user. Strong with C and Assembly ( $\mu$ C programming), PHP, and Spice/analog circuits. Basic skills in Objective-C, Java/OOP, and Javascript/HTML.

Guitarist (college Jazz/Classical ensembles), college radio DJ, passion for recording/mixing & audio hardware. Currently in two active bands. AES Member.

Founder/Pres. of Bose Young Professionals, ~200 pers. group with corporate funding. Recruiter/interviewer.

## *Education*

2005 – 2010

B.S. in Electrical Engineering (conc. Signal Processing)

B.A. in Music (conc. Guitar)

Minor in Biomedical Engineering

**Case Western Reserve University**

GPA: 3.78 / 4.00

*(Signals and Systems, Digital Communications, Signal Processing, Computer Design, Electronic Analysis/Design, Senior Project on novel tube guitar amplifier design.)*

2012

Professional Certificate in Music Production

**Berklee Online School**

*(Critical Listening, Audio Mastering Techniques, Mixing, Recording/Producing, Production Analysis.)*

2013

Audio Measurements Course, Acoustics Course

**Bose Corporation (internal)**

## *Publications*

- Ramsay, et al. *A Novel Fourier Approach to Guitar String Separation*. Proceedings of Irish Signals and Systems Conference. Jun 2011.
- Ramsay, et al. *Base plate mechanics of the barnacle Balanus amphitrite (=Amphibalanus amphitrite)*. Biofouling. 2008; 24(2):109-18.

## *Awards*

Case Trustee's & Alumni Ass'n Scholarships, Nat'l Merit Scholarship, Fulbright Scholarship, Who's Who Students Award Winner, Golden Key & Etta Kappa Nu Honor Societies, Dean's High Honors/Honors all semesters, Beta Theta Pi.