Matthew C. Baron
US Citizen

CONTACT INFORMATION	700 College St Apt. 1 Pittsburgh, PA 15232	*Cell:* 419.280.8205 *E-mail:* mcbaron@cmu.edu

EDUCATION

Carnegie Mellon University, Pittsburgh, PA USA

M.S. (Expected) Electrical and Computer Engineering — May 2018

B.S. w/ Honors Electrical and Computer Engineering, (GPA 3.5/4.0) — May 2014
Double Major: Hispanic Studies

Graduate Courses: Machine Learning for Signal Processing, Computer Vision, Advanced Digital Signal Processing, Pattern Recognition, Electro-acoustics

Massachusetts Institute of Technology, Cambridge, MA USA

Additional Graduate Coursework — Fall 2016 - Spring 2017
Matrix Methods in Signal Processing & Machine Learning, Computational Science and Engineering

PROFESSIONAL EXPERIENCE

Bose Automotive Systems Division, Framingham, MA

Advanced Development Acoustics Engineer — January 2017 - Present
- Innovate spatial rendering through beam-forming and psycho-acoustic models
- Advance frequency domain filter design for many channel cross-talk cancellation

Acoustic Systems Engineer II — June 2015 - December 2016
- Refine and grade mechanical design of UltraNearField headrest acoustics
- Construct psycho-acoustic models and algorithms for stereo image perception
- Prototype and develop transducer array for independent listening environments

Acoustic Systems Engineer I — July 2014 - June 2015
- Generate and document tuning techniques for content reduced audio systems
- Perceptual evaluation and critical listening of automotive audio

Verizon Innovation Center, Waltham, MA

Research and Development Technology Intern — June - August 2013

Carnegie Mellon University, Pittsburgh, PA

Research Assistant, Electrical & Computer Engineering — January 2012 - May 2014
- Implemented algebraic signal processing models for representation and processing of massive data sets with irregular structure
- Bench-marked feature-extraction performance on specific large datasets
- Advisor: Dr. Jose M.F. Moura

PATENTS

C. Oswald, M. Baron, D. Tengleson, B. Subat "Vehicle Headrests" *Acoustic sub-assemblies of directional arrays for automotive audio systems implementing isolated listening zones*. U.S. No. 9706291. Jul. 2017.

SKILLS

Spoken Language: Fluent Spanish, Technical Report Writing
Programming Languages: MATLAB, Julia, C, Perl, LaTeX, shell script

SERVICE

Cambridge Running Club, Cambridge, MA *Treasurer* — January 2016 - August 2017