



CHRIS CARLSON

SEEKING CHALLENGING PROJECTS ROOTED IN
THE INTERSECTION OF ART AND TECHNOLOGY

EDUCATION

Stanford University Center for Computer Research in Music and Acoustics (CCRMA) | Stanford, CA | Sept '10 - June '12

M.A. in Music, Science, and Technology

Selected Coursework: Physical Interaction Design for Music; Software Paradigms for Computer Music; Compositional Algorithms, Psychoacoustics, and Spatialization; Signal Processing Techniques for Digital Audio Effects

James Madison University | Harrisonburg, VA | Aug. '01 - May '05

B.S. in Physics, Minor in Mathematics, Valedictorian and Honors Scholar

Selected Coursework: Analog and Digital Electronics, Acoustics, Calculus I-III, Nonlinear Dynamics and Chaos, Mechanics

WORK EXPERIENCE

Second Story, Interactive Developer | Portland, OR | October '12 - Present

Building responsive environments and bespoke interactive experiences for cultural institutions and brands

Design and develop content-rich, multitouch kiosks, Kinect interactives, low-res LED displays, and spatial audio experiences

Actively involved in proposal writing efforts, experience design, and creative direction

Universal Audio, Intern | Scotts Valley, CA | June '11 - December '11

Executed interaction design and audio software development for an embedded computer music platform

Conceived and developed a "consumer layer" allowing musicians to interface with the BeagleBoard using mobile devices

Stanford CCRMA, Summer Workshop Instructor | Stanford, CA | July '11

Co-taught a week-long "New Music Controllers" workshop using the BeagleBoard xM, Pure Data, and Arduino

Metron, Inc., Project Manager / Analyst | Reston, VA | June '05 - January '10

Managed and executed a multi-year contract to develop simulation tools for the Navy

Developed simulation algorithms in MATLAB and designed all user interfaces

SELECTED CREATIVE WORK

Please visit www.modulationindex.com for detailed documentation.

Borderlands Granular | A new musical instrument for exploring sound using granular synthesis on the iPad

Lovejoy Fountain Activation | An artistic intervention and interactive installation for Design Week Portland 2014

Learning to See | A responsive environment and series of content-rich interactives for the Denver Botanic Gardens

Last Cyclic Routine | A collection of ambient and beat driven compositions, released in 2014

PCO | An interactive installation inspired by synchronous fireflies. Exhibited at SOMArts Gallery San Francisco, April 2011

The Feedbox | A handheld noise instrument featured in the MAKE Magazine blog, November 2012

HONORS AND PUBLICATIONS

Prix Ars Electronica | Award of Distinction in Digital Music and Sound Art for *Borderlands Granular*, 2013

Cyberarts Exhibition | Gallery showing of *Borderlands Granular* in Linz, Austria, 2013

Sónar Festival | Invited performance and talk, Barcelona, 2013

Stanford Institute for Creativity in the Arts | Graduate Fellow, 2011-2012

James Madison University | Valedictorian, Class of 2005

C. Carlson, G. Wang. *Borderlands: An Audiovisual Interface for Granular Synthesis*. Proceedings of the 12th International Conference on New Interfaces for Musical Expression, 2012.

C. Carlson, E. Marschner, H. McCurry. *The Sound Flinger: A Haptic Spatializer*. Proceedings of the 11th International Conference on New Interfaces for Musical Expression, Pages 138-139, 2011.

SKILLS

Languages | C++, openFrameworks, Objective-C, OpenGL, Max/MSP, Pure Data, Processing, Chuck, Javascript, node.js, Matlab

Platforms | OSX, iOS, Windows, Custom Multitouch Surfaces / TUIO Overlays, Pixel Pusher LED Hardware + SDK

Other | Excellent writing abilities and extensive public speaking experience