

Education

M.M., Computer Music and New Media, Northern Illinois University, 2010 (expected)

Advisor: James Phelps, DMA.

Thesis: Swarm Intelligence in Algorithmic Composition

B.S., Computer Science, University of Rochester, 2004

Advisor: Randall Nelson, Ph.D.

Final Project: A Novel, Integrated Approach to Behavior Classification Using Computer Vision and Sound Recognition

Employment

2008-Present, Dekalb, IL

Graduate Assistant, Northern Illinois University

Responsibilities: Teaching "Introduction to Electronic and Computer Music." Supervision and maintenance of three computer music labs. Technical coordination of two to three computer music concerts and events per semester.

2008-Present, Chicago, IL

Developer, JangoMail

Responsibilities: Carry out maintenance of the JangoMail website, and develop new features for the JangoMail email delivery services. *Languages:* ASP.Net, C#.Net, Classic ASP, Javascript, HTML, CSS.

2006-2008, Pittsburgh, PA

Lead Developer, SRS Computing Solutions

Responsibilities: Develop and maintain business software products. Lead the development team. *Languages:* VB.Net, Visual Basic, PHP.

2005-2007, Pittsburgh, PA

Music Director, Community of Reconciliation

Responsibilities: Select music for church services. Perform on the piano and organ. Lead the choir on Sundays and the youth jazz ensemble on Saturdays.

2005, Pittsburgh, PA

Programmer/Contractor, Click, University of Pittsburgh

Responsibilities: Develop an educational, live-action role-playing game for elementary school students that takes advantage of laptops, digital cameras, gps and barcode scanners. *Languages:* C#.Net

2004, Pittsburgh, PA

Programmer/Founder, MapHub

Responsibilities: Implement a collaborative multimedia mapping website that can be interacted with via mobile phone. *Languages:* PHP, HTML, CSS, Javascript.

2004-Present

Freelance Composer, Various Entities

Responsibilities: Write and record music for various videogame and television productions.

Catalog of Works

Concert Music (*representative*):

Year of Composition	Title / Instrumentation	Performances
2009	With the Blurred Vision of a Newborn Piano, Steel Pan and Computer	Two: A Collaborative Concert, Northern Illinois University, November 5, 2009
	Becoming 3-2 Video and 2-Channel Audio	musicBYTES, Lewis University, Romeoville Illinois, October 30, 2009
	Confined 2-Channel Audio	New Music Hartford, ArtSpace Gallery, August 30, 2009
	In the Fields 8-Channel Audio	Composers Concert, Northern Illinois School of Music, Spring 2010 (anticipated)
	The Sound-Life of Gebhart J. Reiling 1926-2007 2-Channel Audio	Composers Concert, Northern Illinois School of Music, Spring 2009
	Manifest Destiny Suite Korg nanoKontrol and Pure Data	Composers Concert, Northern Illinois School of Music, Spring 2009
2008	Pittsburgh 2-Channel Audio	
	Locked Interactive Installation	IMMArts TechArt 2008, November 2008
2007	Self Reliance Piano and Voice	
	The Music of Maphub Java Software	Mattress Factory Art Gallery, Fall 2007

Videogame / Film (*representative*):

Year of Release	Product / Role	Developer	Distributor
2009	The Mold Fairy Composer	Ludus Novus	Armor Games
	James the Super Zebra Composer	The Super Flash Brothers	Armor Games
	Dad's Got Ninjas (TV) Composer / Music Director	Kalec & Kemp	Fremantle Media TV (purchased by Cartoon Network, still undeveloped)
2008	AudioSurf Composer	Dylan Fitterer	Multiple Distributors, including Steam
	Exploit Composer	Ludus Novus	Kongregate
	Arrow of Time Composer	The Super Flash Brothers	Armor Games
	Creekwood Forest Composer	The Super Flash Brothers	Armor Games

Software Development (*representative*)

Year	Name / Language	Overview
2009	Swarm Score Live Java	Swarm Score Live uses concepts from swarm intelligence in real-time score generation. Output is projected live on screen, where it is interpreted by performers.
	Swarm Score Java, Lilypond	Swarm Score uses concepts from swarm intelligence to generate printed scores.
	Becoming the Swarm Java	Becoming the Swarm uses concepts from swarm intelligence to generate electroacoustic music by processing and assembling a gamut of audio files.
	Manifest Destiny Suite Pure Data	This suite of interactive algorithmic pieces was written for the Korg nanoKontrol.
	Tribute Java	Tribute blends evolutionary algorithms with granular synthesis to generate audible sound collages of a person's life.
	Diary Java, PHP	Diary is an interactive installation piece that combines audio journal entries with evolving piano chords.
2008	Locked Java	Locked is an interactive installation piece that creates a harsh audiovisual environment for the viewer.
	Extended Music Java	Extended Music allows the user to compile and play back wave files with multiple data chunks that represent different recordings of a piece.
	Variation on December 1952 Java	An animated version of the Earle Brown piece, as he envisioned it in his notebooks.
	Mare Tranquilitatis Pure Data	A Mark Berry composition written for electronics and steel pan, realized in Pure Data.
2007	FreeSound Spider C#.Net, PHP	This program allows a performer to improvise, with sounds pulled from the internet by real-time searches.
	Wii Play the Drums VB.Net, C#.Net	This program connects with a wiimote to allow the player to play a virtual drumset with a single wiimote.
	Wii Air Guitar VB.Net, C#.Net	This program allows players to use a wiimote to trigger guitar sounds with guitar-playing motions.
2006	Maphub Virtual Instrument Java, PHP	MaphubVI allows a performer to perform in real-time with cell-phone calls that are made to the maphub database.
	OpenTGA Nyquist	OpenTGA allows Nyquist users to import data from a TGA image into their Nyquist programs.

Publications

Austin on Kontakte. *SEAMUS Newsletter*. August 2009.
 Conversations at EMM 2008. Submitted for Publication. 2009.
 Elliot Miles McKinley on earWorm's First Release. Submitted for Publication. 2009.
 Merce Cunningham and Electroacoustic Music. *computermusicblog.com*. July 29, 2009.

Teaching Experience

Course Instructor: Introduction to Electronic and Computer Music

Northern Illinois University (Fall 2008 through Spring 2010)

Undergraduate and Graduate course, 20 students. Taught the history of electronic music and administered practical projects in musique concrete, synthesis and composition. Redesigned course materials, course website and course projects.

Undergraduate Teaching Assistant: Introduction to Computer Technology

University of Rochester (Spring 2003)

Undergraduate course, around 40 students. Assisted with lab work and graded all student work.

Invited Presentations

Becoming: Composition with Swarm Intelligence at New Music Hartford. Presented at the NIU Composition Seminar, DeKalb, IL on October 12, 2009.

Locked. Presented at IMMArts TechArt 2008, DeKalb, IL in November, 2008.

Conversations at EMM 2008. Presented at the NIU Composition Seminar, DeKalb, IL in Fall 2008

Research Experience

Internship with the Department of Defense (Summer 2003)

Supervisor: Randall Nelson, Ph.D.

Programmed the computer vision system for a robot that was used to find unexploded bombs on desert battlefields. This included significant experience in the field of digital signal processing.

Press

Smith, Graham. "AudioSurf Music: A Suite of New Music Designed for Surfing." *PC Gamer Magazine.* May 2008.

George, Charles. Ibbott, Brian. *The Wii Show #10: To the Beat of a Different Drum.* thepodcastnetwork. May 2007.

Hopper, Justin. "Charting New Territory: The Founders of MapHub Want to Get You Offline and Out Into the Streets." *Pittsburgh City Paper.* February 8, 2006.

Awards, Honors and Scholarships

2008, Graduate Assistantship Tuition Waiver, Northern Illinois University

2000, Academic Scholarship, University of Rochester

Professional Memberships

SEAMUS, Society for Electro-Acoustic Music in the United States - Board Member, Webmaster

SCI, Society for Composers, Inc. - Student Member

ASCAP,

References

James Phelps, Associate Professor, Northern Illinois University

Robert Fleisher, Associate Professor, Northern Illinois University

Michael Kalec, Director of Animatics, American Dad, Fox Animation