

Geoffrey G. Martin

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Grønnegade 17
 DK-7830 Vinderup
 Denmark

Education

- September 1998
to May 2001 **Ph.D. (Music, Media and Technology)**
McGill University: Montréal, Québec
 Thesis Title: "A Hybrid Model for Simulating Diffuse First Reflections in Two-Dimensional Synthetic Acoustic Environments"
 Advisors: Dr. P. Depalle and Dr. W. Woszczyk
- September 1991
to May 1994 **Master of Music (Sound Recording)**
McGill University
 Studied in this internationally-recognized graduate-level tonmeister program.
- September 1986
to May 1990 **Bachelor of Music (Pipe Organ)**
Memorial University of Newfoundland: St. John's, Newfoundland

Teaching and Research Experience

- September 2001
to August 2002 **Faculty Lecturer**
Music Technology Area, Faculty of Music, McGill University
 Taught undergraduate courses *Fundamentals of New Media, Introduction to Electronics, Introduction to Electroacoustics* and *Senior Project in Music Technology*.
- 2001 to present **Guest Faculty**
Music and Sound Department, Banff Centre for the Arts: Banff, Alberta
 Served as invited instructor and consultant conducting workshops and seminars for audio associates at this internationally-recognized institution.
- September 1998
to August 2002 **Researcher**
Multichannel Audio Research Laboratory, McGill University
 Participated as a member of this research team investigating various facets of multichannel audio including processing, imaging, synthesis, reproduction and transmission. Also served as Lab Manager for two years during this period.
- September 1994
to April 1996 and
September 1998
to May 2001 **Instructor**
Faculty of Music, McGill University
 Taught graduate-level courses *Electronic and Electroacoustic Measurements in Audio*, and co-taught *Spatial Ear Training*. Also taught the prerequisite undergraduate courses *Introduction to Electronics* and *Introduction to Electroacoustics*. The courses contained theoretical and practical instruction in the design and troubleshooting of analog electronics in audio components.
- September 1996
to June 1998 **Part-time Professor**
University of Ottawa: Ottawa, Ontario
 Taught undergraduate courses *Instruments and Acoustics* and *Computers and Music I and II*. These courses, intended for music students, concentrated on acoustics, desktop publishing for musicians and electroacoustic music composition.

Review

Acted as reviewer for the following books, journals, conventions and conferences

2006	Papers Co-Chair 120th International Convention of the Audio Engineering Society (Paris, France)
2004	117th International Convention of the Audio Engineering Society (San Francisco, USA)
2004	116th International Convention of the Audio Engineering Society (Berlin, Germany)
2003 – present	Member, Review Board Journal of the Audio Engineering Society
2003	Papers Chair 24th International Conference of the Audio Engineering Society (Banff, Canada)
2003	2003 International Conference on New Interfaces for Musical Expression (Montreal)
2003	115th International Convention of the Audio Engineering Society (New York, USA)
2003	Reviewer Mark Ballora, <i>Essentials of Music Technology</i> , Prentice Hall, Upper Saddle River

Memberships

2006 to present	Chair, AES Conference Policy Committee <i>Audio Engineering Society</i>
2003 to 2006	Chair, AES Technical Committee on Microphones and Applications <i>Audio Engineering Society</i>
September 2001 to May 2002	Director, McGill University Concert Webcasting <i>Faculty of Music, McGill University</i>
September 2001 to May 2002	Committee Member <i>Physical Development Committee, Faculty of Music, McGill University</i> Duties involved assisting in the design and layout of infrastructure for a new building that will house the Centre for Interdisciplinary Research in Music, Media and Technology.
November 1999 to May 2001	Graduate Student Representative <i>Physical Development Committee, Faculty of Music, McGill University</i>
January 1999 to present	Member <i>Audio Engineering Society</i>
January 1997 to present	Member <i>Acoustical Society of America</i>
September 1993 to May 1994	Chair <i>Audio Engineering Society Student Chapter, McGill University</i> Duties involved assisting in the arrangement of various visiting lecturers.

Work Experience

- September 2002
to present
- Tonmeister and
Specialist in Sound Design**
Bang & Olufsen A/S, Struer, Denmark
Researching perceptual attributes of reproduced sound in domestic and automotive playback systems. Developing audio DSP algorithms for high-end automotive and home audio systems. Designed sound for the award-winning Advanced Sound System for the Audi A8 and the Sound System for the Audi R8. Designed ring tones for the Serene mobile phone.
- September 1999
to August 2000
- Interim Studio Technician**
Recording Studios, McGill University
Responsible for hardware repairs and general maintenance of three multitrack recording studios, three post-production studios and one audio research laboratory. Equipment included a Sony 3324 multitrack recorder, SonicSolutions systems and ProTools.
- June 1997,
June 1999
and
June 2001
- Head Sound Designer and Mixing Engineer**
Closing Concert, Festival 500: St. John's
Specified all equipment and provided live sound mixing for the final concert of the biannual *Festival 500 International Choral Festival*. These concerts included performances by ensembles such as England's *King's Singers* and Sweden's *Real Group*, as well as a 160-member orchestra and a 600-voice choir.
- August 1996
to June 1998
- Technologist**
Department of Music, University of Ottawa
Supervised all technical requirements for the Department of Music and its concerts, designed and maintained the department's Web site, maintained computer hardware, software and local area networks and made purchase recommendations and decisions.
- October 1995
to June 1996
- Freelance Assistant**
Resonance TJJ Inc.: Montréal
Assisted in creating architectural drawings and performing acoustical and noise measurements with this acoustical consulting firm.
- October 1995
to May 1996
- Assistant Studio Technician**
Electronic Music Studio, McGill University
Responsible for hardware repairs and general maintenance of three electronic music composition and computer music studios.
- September 1995
to February 1997
- Senior Partner**
Media Interaction: Montréal
Co-owner of a multimedia software production company which provided services in corporate web site design, CD-ROM authoring and Internet information retrieval.
- May 1994
to August 1994 and
June 1991
to November 1991
- Production Manager**
Robin Palin Public Relations Inc.: Montréal and Toronto, Ontario
Created computer graphics and layout. Performed hardware and software maintenance on Macintosh platforms and made purchase recommendations.
- June 1993
- Resident Audio Engineer**
Jazz Workshop, Banff Centre for Fine Arts
Duties included recording, mixing and engineering sound reinforcement for nightly performances over four weeks.

Selected Discography

- 2003 **Various Artists**
Active Listening III (Bang & Olufsen Demo CD – 3666005)
 Selection of Tracks, Mastering, Writing of Liner Notes
- 2002 **Luc Beauséjour**
Handel: Italian Cantatas and Other Works (Analekta FL 2 3132)
 Recording Engineering
- Ensemble Les Idées heureuses**
Graupner: Instrumental and Vocal Music, Vol. 1 (Analekta FL 2 3162)
 Recording Engineering
- Erik Reinart, Organ**
Klavierübung III (Atma Baroque ALCD21026/27)
 Recording Engineering, Production, Digital Editing and Mastering
- 2001 **Duo Similia**
Cantabile (Analekta AN 2 8910)
 Recording Engineering
- 2000 **Les Petits Chanteurs du Mont-Royal: Gilbert Patenaude, Conductor**
Noël Autour du Monde (Analekta FLX 2 3088)
 Recording Engineering
- 1996 **Memorial University of Newfoundland Chamber Ensembles**
Tour '96 (Independent Release)
 Recording Engineering, Production, Digital Editing and Mastering, Graphic Design
- Holy Heart of Mary High School Chamber Choir**
And Until We Meet Again... (Independent Release)
 Recording Engineering, Production, Digital Editing and Mastering and Graphic Layout
- 1995 **Newfoundland Symphony Youth Orchestra**
Tracks (Independent Release)
 Recording Engineering, Production, Editing and Mastering
- 1994 **Densil Pinnock and Bill Coon**
Mona Lisa (Verve ERCD 6671)
 Recording and Mixing Engineering
 Two tracks from this disc have been selected for subsequent Verve compilation discs

Significant Academic Contributions and Awards

- 2000 / 2001 **Max Binz McGill Major Fellowship**
McGill University
- 2000 / 2001 **Scholarship**
Faculty of Music, McGill University
- 1999 / 2000 **Team Member**
Centre for Interdisciplinary Research in Music, Media and Technology, McGill University
Participated in this team which was awarded \$8.6 million through a grant of the Canadian Foundation for Innovation for establishing the planned "Centre for Interdisciplinary Research in Music, Media, and Technology" (CIRMMT) in the Faculty of Music at McGill University.
- 1999 / 2000 **Educational Grant**
Audio Engineering Society
- 1999 / 2000 and
1998 / 1999 **Max Stern McGill Major Fellowship**
McGill University
- 1999 **Team Member**
High-fidelity Audio over the Internet, McGill University - New York University
Participated as a member of this team that developed a mixed-protocol transmission system for the world's first broadcast of 5.1 channel AC-3 encoded audio across the Internet. This system was first demonstrated at the 107th International Convention of the AES.

Performance Experience

- September 1997
to 2002 **Founding Member**
Heisenberg Ensemble
Composing works for and performing with this live electroacoustic music trio.
- September 1997
to May 1998 **Director**
Contemporary Music Ensemble, University of Ottawa
Conducted and organized performances for a 20-member ensemble.
- June 1997 **Composition consultant / Performer**
Northern Encounters, Canadian Broadcasting Corporation: Toronto, Ontario
Assisted in the composition and performance of the world premiere of Harry Somers's *Magic Flute* for flute, audio processors and pre-recorded material. The concert was recorded by the CBC for national broadcast in Canada and European distribution on the EBU.
- September 1990
to July 1996 and
September 1998
to June 2002 **Director of Music**
St. John's United Church: Pointe-Claire, Québec
Duties included playing organ, conducting choir and choosing music for weekly church services. Special choral performances were also held biannually.
- May 1988
and May 1990 **Member**
National Youth Choir: Moncton, New Brunswick and Calgary, Alberta
Performed on two two-week tours with these forty-voice choirs comprised of four representatives from each Canadian province.

Selected Compositions

jpr2312 (2002)

For Tracker Pipe Organ and Computer

Premiered at the Christ Church Anglican Cathedral, Montréal

41 (2000)

For Narrator and Computer

Premiered at the State University of New York at Stony Brook

40: Five Reasons for Choosing Concrète (1999) (with D'Arcy Philip Gray)

For Compact Disc

Premiered at the State University of New York at Stony Brook

Lapidary Blues (1998)

For custom-cut slabs of Marble and Granite, Percussion and Audio Processors

Premiered at the State University of New York at Stony Brook

Where the Fishermen Gathered... (1997)

For Flute, Percussion and Compact Disc

Commissioned for the 1998 *Sound Symposium*, St. John's

Recorded for national broadcast on CBC Radio Two's *Two New Hours*

Solo for Unprepared Piano (1997)

For Custom Instrument and Computer-Controlled Audio Processors.

Premiered at the University of Ottawa

tRi (1995)

For Percussion, Audio Processors, Voice and Water

Premiered at McGill University with the New York / Montréal based new music ensemble *gRoUP scRUmP*

Threnody (1990)

For SATB Choir

Premiered at Erskine American Church, Montréal

Languages

Mother Tongue

English

Functional command of conversational and written French and Danish and written Norwegian

Basic command of German

Personal Information

Citizenship

Canadian

Birth date

1969 03 17

General Interests

Black and white film photography and developing

Finish carpentry and wood turning

Comparative religious philosophies

Computer Software & Hardware

I have many years of experience with Macintosh, Unix, Linux, and Windows platforms.

Refereed publications

Aoxiang Xu, Wieslaw R. Woszczyk, Zack Settel, Bruce Pennycook, Robert Rowe, Philip Galanter, Jeffrey Bary, Geoff Martin, Jason Corey, and Jeremy R. Cooperstock (2000) *Real-Time Streaming of Multichannel Audio Data over Internet*. Journal of the Audio Engineering Society, 48.7-8: 627-641.

Non-refereed publications, conference presentations and presentations

Introduction to Sound Recording (in progress). Authoring a comprehensive textbook on various aspects of sound recording theory and practice including acoustics, electronics, digital audio, DSP and microphone techniques. This work is presently being used as a textbook in a number of schools worldwide and is available for download at www.tonmeister.ca.

Us vs. Them: The Reality of Multichannel Audio, Invited lecturer, Conservatoire national supérieur de musique et de danse de Paris, Paris, France, September 28, 2005.

Geoff Martin (2004) *A New Microphone Technique for Five-Channel Recording*. Presented at the 117th International Convention of the Audio Engineering Society, Barcelona, Spain, 28 - 31 May, 2005.

Geoff Martin and Søren Bech (2004) *Attribute Identification and Quantification in Automotive Audio - Part 1: Introduction to the Descriptive Analysis Technique*. Presented at the 117th International Convention of the Audio Engineering Society, Barcelona, Spain, 28 - 31 May, 2005.

Pauli Minaar, Geoff Martin, Woo-Keun Song, Benjamin Pedersen, Flemming Christensen, and Morten Lydolf (2004) *A Listening Test System for Automotive Audio – Part 1: System Description*. Presented at the 117th International Convention of the Audio Engineering Society, Barcelona, Spain, 28 - 31 May, 2005.

Søren Bech, Mehmet Gulbol, Geoff Martin, Jody Ghani, and Wolfgang Ellermeier (2004) *A Listening Test System for Automotive Audio – Part 2: Initial Verification*. Presented at the 117th International Convention of the Audio Engineering Society, Barcelona, Spain, 28 - 31 May, 2005.

The Role of Multiple Low-Frequency Signals in the Perception of Reproduced Sound, Invited Workshop Panelist, 117th convention of the Audio Engineering Society, San Francisco, USA, 28 - 31 October, 2004

Multichannel Audio in Automobiles, Invited Workshop Panelist, 116th convention of the Audio Engineering Society, Berlin, Germany, May 8 - 11, 2004

The Role of Multiple Low-Frequency Signals in the Perception of Reproduced Sound, Invited Workshop Panelist, 116th convention of the Audio Engineering Society, Berlin, Germany, 8 - 11 May, 2004

Jason Corey and Geoff Martin (2004) *Surround Sound Micing Techniques*. Broadcast Engineering, March 1, 2004.

(2003 - 2004) Author and editor of a number of technical manuals for various software products released by Massenburg Design Works (www.massenburg.com).

Jason Corey and Geoff Martin (2003) *Multichannel Matters: Surround Recording Technique – Three Views: A Five-Channel Technique*. Audio Media Online, 2003.

All About Compressors, Invited Tutorial Presenter, 115th convention of the Audio Engineering Society, New York, USA, 10 - 13 October, 2003

Stereo and Surround Microphone Techniques, Tutorial Session Chair, 115th convention of the Audio Engineering Society, New York, USA, 10 - 13 October, 2003

Geoff Martin (2003) *Microphone Technique Tutorial*, and *Introduction to Room Acoustics*. Invited presentations at the Nordic Sound Symposium, Bolkesjø, Norway, 5 - 8 October, 2003.

Stereo and Surround Microphone Techniques, Panel Discussion Chair, 24th Conference of the Audio Engineering Society – Multichannel Audio: The New Reality, Banff, Canada, June 26-28, 2003

Geoff Martin (2003) *Microphone Technique Tutorial*. 114th International Convention of the Audio Engineering Society, Amsterdam, Netherlands, 5 - 8 May, 2003.

Microphone Technique Theory for Stereo and Surround, Invited Tutorial Presenter, 114th convention of the Audio Engineering Society, Amsterdam, Netherlands, 22 - 25 March, 2003

Stereo and Surround Microphone Techniques, Tutorial Session Chair, 114th convention of the Audio Engineering Society, Amsterdam, Netherlands, 22 - 25 March, 2003

Publications (continued)

Geoff Martin (2002) *The significance of interchannel correlation, phase and amplitude differences on multichannel microphone techniques*. 113th International Convention of the Audio Engineering Society, preprint no. 5671, Los Angeles, USA, 5 - 8 October, 2002.

Geoff Martin (2002) *Interchannel interference at the listening position in a five-channel loudspeaker configuration*. 113th International Convention of the Audio Engineering Society, preprint no. 5677, Los Angeles, USA, 5 - 8 October, 2002.

Chair, *Workshop – Stereo and Surround Microphone Techniques*, 113th convention of the Audio Engineering Society, Los Angeles, USA, October 5-8, 2002

Geoff Martin (2002) *A Better Understanding of Stereo Microphone Technique*. Invited presentation, Toronto chapter of the Audio Engineering Society, Toronto, Canada, 22 January 2002.

Jason Corey, Wieslaw R. Woszczyk, Geoff Martin, and René Quesnel (2001) *An Integrated Multidimensional Controller of Auditory Perspective in a Multichannel Soundfield*. 111th Convention of the Audio Engineering Society, preprint no. 5417, New York, USA, 30 November - 3 December 2001.

Geoff Martin, Philippe Depalle, Wieslaw R. Woszczyk, Jason Corey, and René Quesnel (2001) *A Hybrid Model for Simulating Diffuse First Reflections in Two-dimensional Synthetic Acoustic Environments*. Proceedings of the 19th International Conference of the Audio Engineering Society, Schloss Elmau, Germany, 21 - 24 June 2001.

Geoff Martin, Wieslaw R. Woszczyk, Jason Corey, and René Quesnel (2001) *A Computer System for Investigating and Building Synthetic Auditory Spaces - Part II*. Proceedings of the 19th International Conference of the Audio Engineering Society, Schloss Elmau, Germany, 21 - 24 June 2001.

Jason Corey, Wieslaw R. Woszczyk, Geoff Martin, and René Quesnel (2001) *Enhancements of Room Simulation with Dynamic Cues Related to Source Position*. Proceedings of the 19th International Conference of the Audio Engineering Society, Schloss Elmau, Germany, 21 - 24 June 2001.

Geoff Martin (2001) *Techniques for Simulating Diffused Early Reflections in Two Dimensional Synthetic Acoustic Environments*. Invited presentation, Bang & Olufsen a/s, Acoustics Research, Struer, Denmark, 18 June 2001

Geoff Martin (2001 - 2002) Music Technology Column. La Scena Musicale (Regular columnist for this monthly publication for musicians and concert-goers)

Geoff Martin (2000) *A Beginner's Guide to Burning CD's*. Canadian Music Educator, 41.1: 6 - 12.

Wieslaw R. Woszczyk, Jason Corey, and Geoff Martin (2000) *Milestone 1 Report: Appendix 1 – Music and Audio*, CANARIE / ANAST project, McGill – Calgary Advanced Learnware Network, Internal report, September 2000.

Geoff Martin, Wieslaw R. Woszczyk, Jason Corey, and René Quesnel (1999) *Controlling Phantom Image Focus in a Multichannel Reproduction System*. 107th Conference of the Audio Engineering Society, preprint no. 4996, New York, USA, 24 - 27 September 1999.

Geoff Martin, Wieslaw R. Woszczyk, Jason Corey, and René Quesnel (1999) *Sound Source Localization in a Five-Channel Surround Sound Reproduction System*. 107th Conference of the Audio Engineering Society, preprint no. 4994, New York, USA, 24 - 27 September 1999.

René Quesnel, Wieslaw R. Woszczyk, Jason Corey, and Geoff Martin (1999) *A Computer System for Investigating and Building Synthetic Auditory Spaces - Part I*. 107th Conference of the Audio Engineering Society, preprint no. 4992, New York, USA, 24 - 27 September 1999.

Zack Settel and Geoff Martin (1998) *Sound Source Localization in Multimedia Applications*. Journal of the Acoustical Society of America, 104.3.

Geoff Martin (1996 / 1997) *För en bättre förståelse av stereomikrofonteknik*. Musik & Ljudteknik, 37.4 and 38.1.