

Richard McWalter

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Education

Technical University of Denmark - Kgs. Lyngby, Denmark	
Ph.D. Candidate – Hearing Systems	
Technical University of Denmark - Kgs. Lyngby, Denmark	2012.12.31
M.Sc. Engineering Acoustics	
University of Victoria - Victoria, B.C., Canada	2005.04.30
B. Eng. Electrical	
w/ Digital Signal Processing specialization and Computer Music option	
Aldershot High School - Burlington, Ontario, Canada	2000.06.30
French Immersion program as Ontario Scholar	

Work Experience

Sennheiser Communications A/S, Sølrød Strand, Denmark	www.senncom.com
Student Employee, Fitting Solutions	2011.10.30 → 2013.04.30
<ul style="list-style-type: none">• Test system design following current electro-acoustic measurement standards• Tuning of DSP algorithms for both voice communication and music• Acoustic verification of personal communication devices• Interpret and present complex acoustic measurement results in simple holistic methods	
Oticon A/S, Smørum, Denmark	www.oticon.dk
Student Employee, Fitting Solutions	2011.04.30 → 2012.10.31
<ul style="list-style-type: none">• Testing of Oticon Genie Fitting Software from an audiological perspective• Creation of fitting software system requirements and test specifications• Debugging in-house development software, collaborating with developers	
Dynamic Hearing, Melbourne, Australia	www.dynamichearing.com.au
Student Employee, Fitting Solutions	2011.04.30 → 2012.10.31
<ul style="list-style-type: none">• Integrate and highly optimize real time DSP software for personal communication devices (e.g. Bluetooth monaural/stereo headsets)• Collaborate with tier 1 mobile providers for optimal hardware/software performance across several network types• Development and improvement of real time DSP algorithms for telephony communication using CSR BlueCore Bluetooth platform• Prototype hardware for innovative DSP technology development in the field of personal communication• Acoustic test lab improvement and general maintenance including measurement system (Head Acoustics), HATS, diffuse noise generation and result analysis• Collaborate with audiologist for algorithm development and research trials	
CMC Microsystems, Kingston, Ontario	www.cmc.ca
Project Assistant – Co-op Student, (12 months)	
<ul style="list-style-type: none">• Development of national test laboratory infrastructure• Financial analysis Sept-Dec 2002• Test equipment selection• Site installation procedures	

Publications

- McWalter, RI, MacDonald, E, Dau, T 2014, 'Auditory Perception of Statistically Blurred Sound Textures'. (abstract) in Proceedings of ARO Mid-winter Meeting 2014
- McWalter, RI & Dau, T 2013, 'Analysis of the Auditory System via Sound Texture Synthesis'. in Proceedings of the International Conference on Acoustics - AIA-DAGA 2013 . pp. 1114-1117.
- Kapur, A, McWalter, RI & Tzanetakis, G 2005, 'New Music Interfaces for Rhythm-Based Retrieval'. in Proceedings of ISMIR 2005: 6th International Conference on Music Information Retrieval. pp. 130-136.
- Tzanetakis, G, McWalter, RI & Kapur, A 2005, 'Subband-based Drum Transcription for Audio Signals'. in 2005 IEEE 7th Workshop on Multimedia Signal Processing. IEEE.

Scholarships/Grants

- ARO Mid-Winter Meeting Travel Award (500 USD)
- Gennum Corp. Scholarship (1500-1650 CAD Annually from 2000-2004)

Extra Curricular Accomplishments

- Volunteer at Dansk Folkekøkken 2010-2012
- Co-chair of UVic Engineering Grad Committee 2004-2005
- Co-chair of UVic Vegan Association 2002-2005
- Volunteered for Martha's Table (respectful soup kitchen) 2004
- UVic Engineering Students' Society VP Academic Fall 2003

Languages

- English (fluent), French (remedial)
- Danish – Completed module 2 (very remedial)

Hobbies/Interests

Cycling/Swimming/Running, Music composition (guitar, drums, computer), Travel, Vacuum Tube amp design and construction, Hiking/Camping, International Relations, Environmental Issues

References

Torsten Dau (supervisor)
Professor
DTU Elektro – Head of Hearing Systems Group
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Work experience references available upon request.