

Stephanie Cheung

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Research Interests

- paediatric rehabilitation; music-based rehabilitation; interactive computer play; auditory neuroscience, motor learning.

Education

Doctoral Candidate (Biomedical Engineering & Collaborative Program in Neuroscience) **Toronto, ON**
University of Toronto *Sept, 2015 - present*
Dissertation: Movement through Music: Video Games for Music-Supported Motor Rehabilitation.
Supervisors: Dr. Elaine A. Biddiss.

Master's of Applied Science (Electrical & Computer Engineering) **Hamilton, ON**
McMaster University *Sept, 2012 – Sept, 2014*
Thesis: Modelling the Neural Representation of Interaural Level Differences for Linked and Unlinked Bilateral Hearing Aids.
Supervisor: Dr. Ian C. Bruce.

Bachelor of Engineering (Electrical & Biomedical Engineering) **Hamilton, ON**
McMaster University *Sept, 2008 – Apr, 2012*
Capstone: "MACBot": A Robotic Toy for Children with Autism Spectrum Disorders.
Thesis: A Comparison of Wavelet and Short-Time Fourier Transform Techniques for Analysis of Auditory Cortex Beta-Band Activity.
Supervisors: Dr. Hubert de Bruin; Dr. Laurel Trainor; Dr. Takako Fujioka

Associate of The Royal Conservatory of Music (Piano Performance), First Class Honours **Toronto, ON**
The Royal Conservatory of Music *Conferred Jan, 2009*
Studied with Tanya Tkachenko and Boris Zarankin.

Awards & Scholarships

Nov, 2016: Holland Bloorview Spotlight Award - Partnership

Sept, 2016 – present: Wildcat Graduate Scholarship

Sept, 2016 – present: Eleanor Cate Allen Fellowship

Apr, 2016: Holland Bloorview Spotlight Award - Excellence, Innovation, Partnership, and Respect

Sept, 2015 – Aug, 2016: Wildcat Graduate Scholarship

Sept, 2014: Certificate of Excellence for Outstanding Thesis

Aug, 2014: International Hearing Aid Research Conference Student Scholarship

May, 2011 – Aug, 2011: Ward Family Summer Student Scholarship

Research Experience

Research Assistant **Toronto, ON**
PEARL Lab, Bloorview Research Institute *Nov, 2014 – Aug, 2015*

Ward Family Research Summer Student **Toronto, ON**
PEARL Lab, Bloorview Research Institute *May, 2011 – Aug, 2011*

Research Assistant **Hamilton, ON**
Auditory Development Lab, McMaster Institute for Music and the Mind *May, 2010 – Jan, 2011*

Teaching & Supervision

Supervisor, Research Volunteers and Summer Student
PEARL Lab, Bloorview Research Institute

Toronto, ON
Dec, 2015 – present

Teaching Assistant, “Cellular Bioelectricity”
Dept. of Electrical & Computer Engineering, McMaster University

Hamilton, ON
Winter, 2013 & 2014

Teaching Assistant, “Structure of Biological Materials”
Dept. of Electrical & Computer Engineering, McMaster University

Hamilton, ON
Fall, 2012 & 2013

Peer-Reviewed Journal Articles

Cheung, S.*, Han, E.*, Kushki, A., Anagnostou, E., & Biddiss, E. (2016) “Biomusic: An auditory interface for detecting physiological indicators of anxiety in children.” *Front Neurosci.* 10:401. doi: [10.3389/fnins.2016.00401](https://doi.org/10.3389/fnins.2016.00401) (*equal contribution)

Invited Talks

Cheung, S.T. (Feb, 2016). “Merging music and technology for paediatric rehabilitation.” at *Science of Music Seminar Series, Vanderbilt University*, Nashville, TN.

Contributed Conference Presentations

Cheung, S., Hodge, A., Khan, A., Chen, J., Biddiss, E. (Nov, 2016). “Development of music-based video games for upper limb rehabilitation therapy in children with cerebral palsy.” at *12th Annual NeuroMusic Conference*, Hamilton, ON.

Cheung, S.T. (Mar, 2016). “MusicMaster: Movement through Music.” at *CP-NET Workshop 2016*, Toronto, ON.

Cheung, S.T. & Bruce, I.C. (May, 2015). “Can auditory brainstem and midbrain processing of interaural level difference cues really explain perceptual performance?” Presented by I.C. Bruce at *169th Meeting of the Acoustical Society of America*, Pittsburgh, PA.

Cheung, S.T. & Bruce, I.C. (Aug, 2014). “Modeling the neural representation of interaural level differences for linked and unlinked bilateral hearing aids.” at *International Hearing Aid Research Conference*, Lake Tahoe, CA.

Service & Outreach

Co-Chair
Bloorview Research Institute Trainee Executive

Toronto, ON
Sept, 2016 – present

Program Co-Director
Collaborative Program in Neuroscience Undergraduate Mentorship Program

Toronto, ON
Feb, 2016 – present

Co-Founder
All About Kids Research (<http://www.allaboutkidsresearch.ca>)

Toronto, ON
Jan, 2016 – present

Events Chair
Bloorview Research Institute Trainee Executive

Toronto, ON
Oct, 2015 – Aug, 2016

Last updated Nov 20th, 2016.