

Nicholas Esterer
Curriculum Vitae

Information

Email: nicholas.esterer@gmail.com
Location: Montréal, Canada

Citizenship: Canadian
GitHub: <https://github.com/mondaugen>

Education

McGill University

January 2013 – August 2016
Master's of Music Technology (M. A.)
Cumulative GPA: 3.92
Thesis: "Audio Source Separation via the Grouping of Partial in the Sum-of-Sinusoids Model"

McGill University

2006 – 2011
Bachelor of Music (B. Mus.) Major in Composition, Minor in Mathematics,
Minor in German Language
Cumulative GPA: 3.74, Graduated with Distinction

Eberhardt-Karls-Universität Tübingen, Germany

2008 – 2009
Mathematics, Music Theory and German Language
(Exchange program through McGill University)

Coursera

September 2016 – October 2016
Probabilistic Graphical Models 1: Representation
January 2018 – April 2018
Machine Learning

Awards

Heritage Canada: Young Canada Works Grant 2012. Value: \$6500
Emploi Quebec: Jeunes volontaires 2012. Value: \$6750
CIRMMT research grant 2011. Value: \$500
Baden-Württemberg Stipend 2008. Value: 2500 Euro
James McGill Scholarship 2007. Value: \$1000

Skills

Software Development

Internal applications for industry: product testing, data collection.
Firmware: software connecting to physical hardware.
Optimized libraries: software tuned for a particular machine or architecture.

Signal Processing

Implementation of algorithms suitable for processing audio and music, from prototype to optimized code.

Experience with:

- Signal treatment: compression, limiting, noise removal.
- Speech and music processing: time stretching / pitch shifting, source filter estimation.
- Machine learning: polyphonic pitch detection using neural networks, audio source separation.
- Spatial audio: implementation of binaural transfer function spatialization.