JAMIE BEVERLEY - CURRICULUM VITAE

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EDUCATION

M.Sc. in Applied Computing (University of Toronto)

Sept. 2018 – Dec. 2019 (expected)

 Courses: Human-Computer Interaction, Critical Thinking for Human-Computer Interaction, Machine Learning and Data Mining, Computational Social Science

M.A. in Communications and New Media (McMaster University)

Sept. 2017 – Sept. 2018

- New Media Reserach Methods, Communications Research Methods, Memory Studies, Critical Data Studies, Feminist Science and Technology Studies, Cyber-Marxism
- Thesis: Web-based environmental sound art installation and performance (https://github.com/JamieBeverley/Precipitate).

B.Arts.Sc. (Hon) summa cum laude (McMaster University)

Sept. 2013 – April 2017

- History, philosophy, economics, mathematics, biology, science and technology studies, minor in computer science.
- Thesis: Audience-participatory live-coding performance system (Unity Game Engine, JavaScript, Node.js, SuperCollider)

PUBLICATIONS (peer reviewed)

Beverley, Jamie, and David Ogborn. "CrowdPatching: a system for audience participation in algoraves". In *Proceedings of the International Conference on Live Coding 2017*. Morelia, Mexico, Dec. 4th to Dec. 8th, 2017. Available at http://iclc.livecodenetwork.org/2017/cameraReady/shortpaper-beverley-crowdpatching.pdf

Ogborn, David, Jamie Beverley, Eldad Tsabary, and Alex McLean. "Estuary: Browser-based Collaborative Projectional Live Coding of Musical Patterns". In *Proceedings of the International Conference on Live Coding 2017*. Morelia. Mexico, Dec. 4th to Dec. 8th, 2017. Available at http://iclc.livecodenetwork.org/2017/cameraReady/ICLC_2017_paper_78.pdf

RESEARCH

Estuary (Research Assistant, McMaster University)

May 2016 - present

- Web-based host for multiple and proliferating live coding languages oriented towards sonic and visual exploration and other forms of artistic expression.
- Programmed in Haskell and compiled into Javascript to run entirely in the browser.
- Deployed at: <u>www.intramuros.mcmaster.ca</u>:8002 Source available at: <u>https://github.com/d0kt0r0/Estuary</u>

Precipitate - Masters Major Research Project

Sept. 2017 - Sept. 2018

• Web-based environmental sound art installation and performance system (https://github.com/JamieBeverley/Precipitate).

ABLE (Research Assistant, McMaster University)

May 2018 – Sept. 2018

- Gamifying mobility exercises for older adults with wearable devices and audio-visual experiences.
- Responsibilities: Implemented Bluetooth communication (Arduino, Noble.js), designed reactive
 audio-visual experiences (SuperCollider, Unreal Game Engine), developed website (JavaScript,
 Node.js, CSS), conducted focus groups.

Inner Ear Aug. 2017 – March 2018

- Web-based ear training platform for electroacoustics and multimedia students.
- Programmed in Haskell and compiled into Javascript to run in the browser.
- Responsibilities include developing a Haskell model of the Javascript Web Audio API, designing
 interfaces for sound playback, and incorporate feedback from students using the software in class.
- Deployed at: www.intramuros.mcmaster.ca:8000
 Source available at: https://github.com/d0kt0r0/InnerEar

CrowdPatching April 2017

- Interactive and generative audiovisual system for audience engagement in live-coding performance (audio SuperCollider, visuals Unity game engine, server NodeJS, web application Javascript).
- Paper presented at the International Conference on Live Coding 2017 in Morelia, Mexico.
- Source available at: https://github.com/JamieBeverley/CrowdPatching

WebDirt May 2016

- Re-implemented the Dirt sound sampling software (https://github.com/tidalcycles/Dirt) in Javascript using the Web Audio API.
- Source available at: https://github.com/d0kt0r0/WebDirt

TEACHING

Teach Assistant – Introduction to Digital Audio

Sept 2017 - April 2018

 Lead weekly tutorials, holding office hours, and marking assignments for a second year Introduction to Digital Audio (MM 2G03) course at McMaster University

Volunteer Programming Lessons

January – April, 2016 and 2017

- Started 'Coding in Commons' initiative to teach peers how to program in Python.
- Provided McMaster Arts and Science students with biweekly introductory programming lessons, practice problems, and other online educational resources.
- Slides for 2017:

https://docs.google.com/presentation/d/1y5RvnxOxGydsMa0xHqCXcnJNHEq7ft3Dr1KkyC8g9t0/edit?usp=sharing

HONOURS

Charon Burke McCain Memorial Scholarship (McMaster, Charon Burke McCain)

2016

For academic excellence and community engagement.

Honour Awards Entrance Scholarship (McMaster University)

2013

• Entrance scholarship for maintaining secondary school academic excellence.

WORKSHOPS

McMaster Global Engineering Conference (Hamilton, ON)

Jan. 2018

• Co-lead a workshop on live coding and programming in the arts.

Estuary Workshop – International Conference on Live Coding (Morelia, MX)

Dec. 2017

• Helped demonstrate Estuary software and troubleshoot for workshop attendees.

Combining 2 Cultures Conference (Hamilton, ON)

Jan. 2017

• Lead an introductory workshop on programming for the undergraduate Combining 2 Cultures Conference at McMaster University.

Estuary Workshop - International Conference on Live Coding (Hamilton, ON)

Oct. 2016

• Helped demonstrate Estuary software and added new features requested by workshop attendees.

PERFORMANCES

International Conference on Live Coding (Madrid, ES)

Jan. 2019

- Improvised solo live coding algorave performance showcasing the TidalStems extension for Tidalcylces (https://github.com/JamieBeverley/tidalstems) and a new system for reactive visuals (https://github.com/JamieBeverley/tidalvisuals)
- Audiovisual 'roulette' live coding with the Cybernetic Orchestra using the *Estuary* platform.

Smartphone Soundscapes at HAVN Sonic Art Series (Hamilton, ON)

April 2018

• Live coding improvisation that leveraged the Web Audio API to play sounds through the smartphones of audience members, supplemented by a stereo PA system.

International Conference on Live Coding (Morelia, MX)

Dec. 2017

- Solo live coding improvisation using Tidalcycles.
- Live coding performance with McMaster's Cybernetic Orchestra.

New Interfaces for Musical Expression (Copenhagen, DK)

May 2017

Live coding performance with McMaster University's Cybernetic Orchestra.

International Conference on Live Coding (Hamilton, ON)

Oct. 2016

• Live coding duet with Ali Khajehei as 0b01 BEATS using the Jam.sc SuperCollider extension.

ORGANIZATIONS

Society of Arts and Science Students

Sept. 2013 to May 2017

- Vice President Social (September 2016 May 2017). Planned and executed social events for the Arts and Science student body, coordinated and lead a committee of volunteers.
- Level 3 Representative (fall 2015 spring 2016).
- Conducted regular website maintenance for the society's website: www.sassweb.ca

Activism Involvement

(September 2013 to present)

- Member of Fossil Free McMaster, fossil fuel divestment club (Sept. 2015 to April 2016).
 - Helped organize and implement events, outreach initiatives, and environment cleanups.
- Member of Hamilton 350 Environmental Organization (Sept. 2015 to April 2016).
 - Attended meetings at Hamilton City hall, took minutes and helped plan outreach events.

SOFTWARE REPOSITORIES

Estuary (https://github.com/d0kt0r0/estuary)

• Web-based host for multiple and proliferating live coding languages.

Precipitate (https://github.com/JamieBeverley/Precipitate)

• Web-based environmental sound art installation and performance system.

Inner Ear (https://github.com/d0kt0r0/InnerEar)

• Web-based ear training platform for use in undergraduate electroacoustics classes.

Smartphone Soundscapes (https://github.com/JamieBeverley/smartphone-soundscapes)

• Live coding performance system for playing sounds on audience smartphones.

CrowdPatching (https://github.com/JamieBeverley/CrowdPatching)

Generative audiovisual system for audience participation in algoraves.

WebDirt (https://github.com/d0kt0r0/WebDirt)

• Re-implementation of the Dirt (https://github.com/tidalcycles/Dirt) sampling software in Javascript.

MusicW (https://github.com/d0kt0r0/MusicW)

Haskell monad and foreign function interface for the Web Audio API.

huMelody (https://github.com/JamieBeverley/huMelody)

Evolutionary machine learning algorithm for composing melodies that adapts to facial cues.

Digital Record Box (https://github.com/JamieBeverley/DRB)

• 3D printed sound file playback device that appeals to multi-modal forms of interaction afforded by vinyl records.

Jam.sc (https://github.com/JamieBeverley/SuperCollider-Extensions)

 Collection of SuperCollider extension classes for making and performing music, including synthesis DSP patches, tablet sequencer interfaces, GUIs, and sound file manipulation functions.