

Linnéa Kirby

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EDUCATION

McGill University, Montréal. MSc, Electrical Engineering, expected 2023.

Advisors: Jeremy Cooperstock, Shared Reality Lab (SRL)
Marcelo Wanderley, Input Devices and Music Interaction Laboratory (IDMIL)

Affiliations: Shared Reality Lab; <http://srl.mcgill.ca/>
Centre for Intelligent Machines; <https://www.mcgill.ca/cim/>
Centre for Interdisciplinary Research in Music, Media, and Technology (CIRMMT); <https://www.cirmmt.org/>

Oberlin College, OH. BA, Psychology, Minor in Computer Science and Concentration in Cognitive Sciences, 2016.

Honours and Awards: Phi Beta Kappa (2015-2016)
John F. Oberlin Scholarship (2012-2016)
First Place Team Member at Ohio Wesleyan University Programming Contest (2016)

Study Abroad: **Université Libre de Bruxelles/Vrije Universiteit Brussel**, Brussels, Belgium, 2014
- Psychology (taught in French) and Flemish Dutch

New England Center for Circus Arts (NECCA), Brattleboro, VT. PROTrack Contortion, 2018.

Esh Circus Arts, Somerville, MA. Professional Preparatory Program, Contortion, 2017.

NOTABLE PROJECTS

Haptic-Assisted iNversions Device (HAND) – MSc. Thesis – in progress.

A handbalancing apparatus using the [SensingTex Pressure Mat Platform](#) and a pair of custom haptics-augmented palmless, fingerless gloves designed to monitor and provide feedback on handstand posture.

t-Tree – [Short Paper](#) – 2022.

A standalone Digital Musical Instrument (DMI) and t-Stick hub designed and prototyped in collaboration with Paul Buser. Paper published in [NIME2022 Conference](#).

HaptiColour – [WIP Paper](#) – 2021.

A haptic-assisted colouring program using the [Haply 2DIY](#) haptic pantograph. Paper published in [IEEE World Haptics Conference 2021](#).

Vibroraptile – [Github Repository](#) – 2021.

A vibrotactile display that maps auditory signals from a nature exhibit to give visitors the ability to not only see and hear, but also feel otherwise untouchable animals. Submission to [IEEE World Haptics Conference 2021 Student Innovation Challenge](#).

Haptic Dance Shoes – 2021.

Oversaw a group of Capstone students as they completed work on a pair of dance shoes designed to teach salsa to novice dancers.

CirqueIT – <http://cirqueit.info>

A collaboration with interactive sound designer Christiana Rose to design and create interactive and responsive circus apparatuses.

Coding is O.K. – <https://codingisok.com/>

A collaboration dedicated to creating clear and accessible resources for intermediate computer programmers.

Flocking – 2016.

Meditative video game about creating and maintaining a flock of birds.

Stepping Stones: All Squared Away – 2016.

Puzzle-based video game about path-building using colourful blocks.

BPL Compiler – 2016.

Compiler for "Bob's Programming Language," a subset of c.

Layout – 2016.

Simple python program for bookbinders that, given a number of pages, outputs an efficient book layout.

Anosmia Perfumery – 2016.

Multimedia artist book exploring how to smell without the ability to smell, presented in a clamshell box.

History of Hysteria: A Timeline in Comic Form – 2016.

Cartoon timeline of the history of female hysteria from Hippocrates to present-day, bound as an accordion within a hard-cover shell.

Distill.java & Exception – 2016.

Companion books exploring the frustration of debugging a program and the resulting exceptions, bound as a binding invented by the artist.

CRAB SHell (CRASH) – 2015.

Simple crab-themed shell program that supports commands such as: cat, ls, rm, >, |, and exit.

Le cirque des rêves – 2015.

A silkscreened French-language short story about the perils of jealousy, set in a circus and with accompanying pictures.

Story Book – 2012.

A multimedia poem about the artist's childhood summers in Norway, bound as a coptic.

The King's Breakfast – 2012.

A typographic rendition of the poem by A. A. Milne, bound as a coptic.

Un jeu avec la mort – 2012.

A French-language short story about love and talking to Death, set in the underworld and with accompanying paper cutouts, bound as a single-signature hardcover.

NOTABLE PERFORMANCES

***Can't Stop Running* - Solo Contortion - PROTrack Year One Showcase**, New England Center for Circus Arts, Brattleboro, VT – 2018.

***Break a Leg!* - Partner Acrobatics - PROTrack Year One Showcase**, New England Center for Circus Arts, Brattleboro, VT – 2018.

***Snow* - Group Silks - The Flying Nut Express**, New England Center for Circus Arts, Brattleboro, VT – 2017.

***Weird Part of the Night* - Solo Contortion - 17 Words: The Esh Circus Arts Advanced Studies Show**, Arts at the Armory, Somerville, MA – 2017.

***17* - Group Acro Dance - 17 Words: The Esh Circus Arts Advanced Studies Show**, Arts at the Armory, Somerville, MA – 2017.

***The Strong Man* - Partner Acrobatics - OCircus! Presents: Under the Big Top**, Oberlin, OH, 2016.

***append: A Senior Collaboration between Dance and TIMARA at Oberlin* - Dance and Partner Acrobatics**, Oberlin, OH, 2016.

***The Rag Doll* - Solo Contortion, OCircus! Presents: Grandma's Attic**, Oberlin, OH, 2015.

***Plumnopédie* - Solo Contortion - NECCA Bootcamp Show**, New England Center for Circus Arts, Brattleboro, VT – 2015.

***The Cat* - Solo Lyra - Oberlin College Aerialists Present: Falling Up**, Oberlin, OH – 2015.

***Sinkin' Soon* - Duo Burlesque Lyra - Oberlin College Aerialists Present: Cirque du Cabaret**, Oberlin, OH – 2015.

***Seven Sisters* - Group Partner Acrobatics - OCircus! Presents: The Greatest Show Off Earth**, Oberlin, OH, 2015.

***The First of Mays: A Short Silent Film about the Circus* - Acting, Tightwire, and Hooping**, Oberlin, OH, 2015.

***Nightmares & Thrills* - Partner Acrobatics, Triples Trapeze, and Fire Breathing - Oberlin College Aerialists Present: Up in Smoke**, Oberlin, OH, 2014.

***Masquerade Ball* - Group Partner Acrobatics - OCircus! Presents: King Bidgood's in the Bathtub and He Won't Get Out!**, Oberlin, OH, 2014.

***The Machine* - Partner Acrobatics - OCircus! Presents: Mrs. Borden's Boarding House**, Oberlin, OH, 2013.

***Aerobics Exercise* - Group Tumbling and Partner Acrobatics - OCircus! Presents: RAD: The Totally Tubular Circus**, Oberlin, OH, 2013.

SKILLS

Programming Language Proficiencies:

Java, python, c, c++, c#, HTML5/CSS

Software Proficiencies:

Adobe Photoshop, Affinity Designer, Affinity Photo, IBM SPSS Statistics, Microsoft Office

Programming Environment Proficiencies:

Unity, git, Sublime, Eclipse, PyCharm, Processing, Arduino

Digital Media and Design:

Expertise in bookbinding, printmaking, and drawing using both digital and traditional media.
Skilled at poster and web design. (Portfolio upon request.)

Languages:

Fluent in French. Reading knowledge of Spanish and Portuguese.

Performance:

Disciplines include dance, contortion, lyra, and partner acrobatics. (Video upon request.)

PROFESSIONAL EXPERIENCE IN SOFTWARE ENGINEERING AND DESIGN

Web Design Team, Folio Art and Design Magazine, Montréal, QC – 9/21 - present.

Maintained the Folio website at <https://www.foliomagazine.ca/>.

TA – Haptics Class, McGill University, Montréal, QC – 1/22 - 5/22.

One of several TAs tasked with reviewing students' lab work, advising on term projects, and conducting lab sessions.

Hybrid Chair – [ACM ICMI 2021 Conference](#), Montréal, QC – 5/22.

One three hybrid chairs tasked with smoothly transitioning between in-person and virtual events.

Grader – Capstone Projects, McGill University, Montréal, QC – 1/21 - 5/21.

One of two graders tasked with reviewing group undergraduate Capstone projects and ensuring completion of milestones.

Freelance Graphic Designer/Software Engineer – 4/13 - 9/20.

Projects include:

Personal website – <https://linneakirby.com>

Antenna Array Visualizer (Link to gist upon request.)

A visualisation project for the Universidad Interamericana de Puerto Rico in Bayamón to calculate and display metrics about a radio antenna array in Aguadilla, PR.

Forensic Software Engineer/Reverse Engineer, Cipher Tech Solutions, Linthicum Heights, MD – 12/16 - 3/17.

Essential member of a small team concentrated on analysing and reverse engineering malicious documents.

Grader – Algorithms Class, Oberlin College, Oberlin, OH – 2/16 - 5/16.

One of five graders tasked with reviewing students' problem sets in algorithms (greedy algorithms, dynamic programming, network flow, and NP-complete) and evaluating for correctness and clarity.

Tutor – Data Structures, Oberlin College, Oberlin, OH – 9/15 - 5/16.

Tutored two undergraduate students in data structures concepts and assisted them with developing and implementing solutions in Java. Both students benefited from the assistance and passed the course.

iD Tech Camp Instructor, iD Tech, Columbus, OH – 7/15 - 8/15.

Taught 3D Game Design with Minecraft and FPS Game Design Courses.

Computer Science Lab Assistant, Oberlin College, Oberlin, OH – 5/15 - 12/15.

Provided debugging assistance to introductory Computer Science students during their weekly labs in Python and Java. Shared insights and tips with students to help them implement robust solutions to a wide variety of programming challenges, including The Game of Life, recursion problems, maze solving, Markov models, Boggle, and the Kevin Bacon game.

Research Assistant in Social Psychology, Oberlin College, Oberlin, OH – 2/15 - 5/15.

Assisted in the interpretation of data using IBM SPSS statistical software and created written reports of findings.

OTHER WORK EXPERIENCE

Translator, CIRMMT, Montréal, QC – 5/22 - 5/22.

Translated web pages for the conference [Le son du futur/Le futur du son](#) organised by The Centre for Interdisciplinary Research in Music Media and Technology(CIRMMT).

Host/Counter, Hazel Restaurant, Brattleboro, VT – 1/18 - 5/18.

Seated customers, answered phones, took and organised takeout orders, served food.

Shop/Baking Assistant, True North Granola, Brattleboro, VT – 12/17 - 5/18.

Prepared packaging materials, organised orders, helped bake granola.

Respite Worker, Brattleboro, VT – 10/17 - 5/18.

Assisted the mother of a child with severe autism.

Host, Whetstone Station Restaurant and Brewery, Brattleboro, VT – 9/17 - 12/17.

Seated customers, answered phones, and managed waitlist.

Administrator, OCircus!, Oberlin, OH – 1/13 - 5/16.

Planned bi-annual circus shows. Designed and rendered posters.

Student Assistant, Office of the Dean of Students, Oberlin College, Oberlin, OH – 5/14 - 8/14.

Answered phones, made appointments, filed documents, assisted the deans and administrative assistants.

Assistant Art Librarian, Oberlin College Art Library, Oberlin College, Oberlin, OH – 2/14 - 5/14.

Shelved books, checked material in and out, assisted patrons with computers and software.

Partner Acrobatics ExCo Instructor, Oberlin College, Oberlin, OH – 9/13 - 12/13.

Created a lesson plan and taught members of the Oberlin community basic partner acrobatics.

Summer Camp Counsellor, School of Acrobatics and New Circus Arts, Seattle, WA – 6/13 - 8/13.

Introduced circus apparatuses and taught basic circus skills, emphasising safety.