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Liam Pond

EDUCATION

McGill University, Montréal

Master of Arts in Music Technology – Supervisor: Dr. Ichiro Fujinaga
GPA: 3.85/4.00

August 2024 – Expected Spring 2027

University of Toronto, St. George Campus, Toronto

Bachelor of Music in Classical Piano Performance – Professor: Dr. Jamie Parker
Mathematics Minor, Piano Pedagogy Certificate
GPA: 3.95/4.00

September 2019 – April 2023

PUBLICATIONS

Pond, Liam, Yinan Zhou, Sichen Meng, Linnea Kirby, Sebastien Chow, Simon Ngassam, Dylan Hillerbrand, and Ichiro Fujinaga. 2026. “Facilitating Access to LinkedMusic with SESEMMI.” In *Proceedings of the 13th International Conference on Digital Libraries for Musicology*. Thessaloniki, Greece. https://doi.org/10.1145/3815723.3815727.

Pond, Liam, Tace McNamara, and Ichiro Fujinaga. Forthcoming. “The Benchmark for Encoding Assessment in Music (BEAM-LLM): Evaluating LLM Performance in Symbolic Music Parsing.” In *Proceedings of the Music Encoding Conference 2026*. Tokyo, Japan.

Pond, Liam, and Ichiro Fujinaga. 2025. “Teaching LLMs Music Theory with In-Context Learning and Chain-of-Thought Prompting: Pedagogical Strategies for Machines.” In *Proceedings of the 17th International Conference on Computer Supported Education – Volume 1: CSME*, 671–681. Porto, Portugal. https://doi.org/10.5220/0013506100003932.

Saini, Vinay, **Liam Pond**, Jackson Uhryn, Albert Kalayil, Aditya Tomar, Kasimuthumaniyan Subramanian, Milana Trifkovic, and Philip Egberts. 2025. “Shear-Dependent Tribological Behavior of Oleic Acid as a Sustainable Lubricant Additive in Oils and Nano-Greases.” *Wear* 570: 205932. https://doi.org/10.1016/j.wear.2025.205932.

Burt, Lauren, **Liam Pond**, Annabel Bugbird, David Hanley, and Steven Boyd. 2025. “Canadian Adult Reference Data for Body Composition, Trabecular Bone Score and Advanced Hip Analysis Using DXA.” *Journal of Clinical Densitometry* 28 (1): 101535. https://doi.org/10.1016/j.jocd.2024.101535.

Abid, Noor, **Liam Pond**, and Svetlana Yanushkevich. 2024. “Causality Exploration in Modeling Engineering Student Satisfaction.” In *Proceedings of the 2024 IEEE Global Engineering Education Conference (EDUCON)*, 1–10. Kos, Greece. https://doi.org/10.1109/EDUCON60312.2024.10578860.

Anzum, Fahim, Ashratuz Zavin Asha, Lily Dey, Artemy Gavrilov, Fariha Iffath, Abu Quwsar Ohi, **Liam Pond**, Md Shopon, and Marina L. Gavrilova. 2024. “A Comprehensive Review of Trustworthy, Ethical, and Explainable Computer Vision Advancements in Online Social Media.” In *Global Perspectives on the Applications of Computer Vision in Cybersecurity*, edited by Franklin Tchakounté and Marcellin Atemkeng, 1–46. Hershey, PA: IGI Global. https://doi.org/10.4018/978-1-6684-8127-1.ch001.

SELECTED AWARDS

Bo Alphonce Travel Award – **$9,181**	2026
CIRMMT Inter-centre Research Exchange Funding – **$4,000**	2026
Master’s Research Scholarship (B1), Fonds de recherche du Québec – **$40,000**	2025 – 2027
Bo Alphonce Travel Award – **$5,193**	2025
Graduate Travel Award, McGill University – **$800**	2025
Travel Award, Centre for Interdisciplinary Research in Music Media and Technology – **$1,200**	2025
Graduate Excellence Fellowship, McGill University – **$23,300**	2024 – 2026
McGill International Research Master’s Award, McGill University – **$8,700**	2024
W. O. Forsyth Admission Scholarship, University of Toronto – **$5,600**	2019 – 2023
Audience Choice Presentation Award, McCaig Summer Student Symposium	2022
PNN Scholarship, University of Toronto – **$1,200**	2021
Wayne Vance Scholarship for Organ Performance, University of Toronto – **$1,365**	2020
Harald and Jean Bohne Scholarship, University of Toronto – **$2,600**	2019
First Place, National Final 15 Years Old, Canadian Music Competition	2018
Rotary Calgary Concerto Competition, performed with the Calgary Civic Symphony – **$1,000**	2018

RESEARCH EXPERIENCE

Research Assistant, Queen Mary University of London

Centre for Digital Music – PI: Dr. Simon Dixon (Electronic Engineering and Computer Science)

September 2026 – October 2026

- Extending MAJEPPA, a self-supervised joint-embedding predictive model that generates expressive piano performances from a score across skill levels, from beginner to professional

Research Assistant, McGill University

Distributed Digital Music Archives & Libraries Lab – PI: Dr. Ichiro Fujinaga (Music Technology)

September 2024 – Present

- Supervised four summer students working on the LinkedMusic project
- Engineered an LLM-based tool to translate natural language to SPARQL database queries

- Adapted a singing voice synthesis tool for Latin medieval chants
- Presented research in a poster at LLM4MA, an ISMIR 2025 workshop in South Korea

Research Assistant, University of Calgary

Nanotribology Laboratory – PI: Dr. Philip Egberts (Mechanical and Manufacturing Engineering)

January 2024 – July 2024

- Processed lubricant friction data using Python – GitHub
- Conducted experiments to test the effect of oleic acid in lubricants; results published in *Wear*
- Operated a custom tribometer using LabVIEW software
- Synthesized and tested lubricants with varying properties
- Analyzed wear scars using a Leica DM6000 M materials science microscope

Research Assistant, University of Calgary

Biometric Technologies Laboratory – PI: Dr. Svetlana Yanushkevich (Electrical and Software Engineering)

May 2023 – January 2024

- Analyzed equity, diversity, and inclusion data for first-year engineering students
- Automated survey data migration to Excel using Python
- Co-authored a conference paper for IEEE EDUCON 2024

Research Assistant, University of Calgary

Biometric Technologies Laboratory – PI: Dr. Marina Gavrilova (Computer Science)

May 2023 – October 2023

- Conducted a comprehensive literature review of music emotion recognition studies
- Recorded a multi-genre piano music database for music preference studies
- Co-authored a book chapter on computer vision advancements in online social media

Summer Student Researcher, University of Calgary

Chickadee Challenge – PI: Dr. Marjan Eggermont (Sustainable Systems Engineering)

May 2023 – August 2023

- Created classroom activities for Grade 4 students to think critically about music and nature
- Composed *Black-Capped Chickadee's Sunday Afternoon* for solo piano
- Designed and 3D printed a visualization of sound using OpenSCAD and Praat
- Presented bio-inspired pedagogical strategies in the 2023 UofC Engineering Education Forum

Summer Student Researcher, University of Calgary

Bone Imaging Laboratory – PI: Dr. Steven Boyd (Radiology)

May 2022 – August 2022

- Developed statistical analysis software using GAMLSS, an R package

- Published results in the *Journal of Clinical Densitometry*
- Received the Audience Choice Presentation Award at the McCaig Summer Student Symposium
- Presented at the Biomedical Engineering Undergraduate Summer Student Symposium
- Integrated code into the team's website, normative.ca

WORK EXPERIENCE

System Administrator and Full-Stack Developer

Digital Analysis of Chant Transmission (Cantus Database)

January 2026 – Present

- Administered cloud infrastructure on DRAC (Digital Research Alliance of Canada) servers
- Migrated the site's production and development infrastructure between Arbutus cloud instances
- Contributed and merged 27 pull requests, improving both the front end (cantusdatabase.org) and back end (Django/PostgreSQL)
- Designed an interactive cataloguing prototype for troped chants that will be demonstrated at the International Musicological Society's 2026 Cantus Planus meeting

Mila-B21 BLUE Fellow

Building 21, McGill University

January 2026 – April 2026

- Built the Newton Fractal Sonifier, which renders a zooming video of a Newton fractal and maps the image to sound, letting users hear the fractal's structure
- Deployed a Flask interface to Hugging Face Spaces with Docker
- Tested the extent to which LLMs can follow the strict formal rules of species counterpoint using 18th-century composition exercises

Freelance Solo and Collaborative Pianist

September 2016 – Present

- Performed five solo piano recitals in venues at the University of Toronto, Mount Royal University, and the Avenue Road Music & Performance Academy
- Substituted as a choral pianist with the Calgary Philharmonic Chorus
- Served as the Calgary Civic Symphony's orchestral pianist (3 years)
- Accompanied dozens of singers and instrumentalists in recitals, juries, and competitions

Private Piano and Music Theory Teacher

September 2018 – Present

- Guided dozens of students ages 3 to adult to appreciate music and build a healthy work ethic
- Prepared students for RCM (Royal Conservatory of Music) Piano/Theory exams up to Level 8
- Coached a student to achieve a perfect score on the Level 7 RCM Theory exam

COMMUNITY

Music Graduate Students' Society (MGSS), McGill University

President

May 2025 – April 2027

- Directed all MGSS activities and initiatives for the 2025–2026 and 2026–2027 years
- Created a sustainable investment fund of $20,000 to support travel expenses for auditioning performance students
- Applied for and secured **$42,654** from PGSS for the purchase of two study pods for the Marvin Duchow Music Library

Founder, McGill Music Research Club

September 2024 – March 2025

- Founded and independently managed a music research journal club
- Curated interdisciplinary guest speaker series
- Secured funding from MGSS and CIRMMT (Centre for Interdisciplinary Research in Music Media and Technology)
- Managed social media presence, including designing posters and running an Instagram account

PGSS Delegate and Music Technology Area Representative

September 2024 – April 2025

- Liaised between MGSS and PGSS regarding policy updates and issues
- Advocated for music technology graduate students within the Department of Music Research
- Organized social events for music technology graduate students

Consort Eureka (Non-profit Organization)

Founding Executive Director

December 2025 – Present

- Founded Consort Eureka, a non-profit organization that provides free educational concerts to help audiences understand and appreciate classical music
- Performed, recorded, and organized the inaugural New York City concert

Post-Graduate Students' Society (PGSS), McGill University

Councillor

September 2024 – April 2025

- Debated and voted on university-wide initiatives and policies
- Advised on legal proceedings between PGSS and McGill University
- Represented music graduate students in the PGSS council

Appointments Board Member

September 2024 – April 2025

- Evaluated commissioner applications for the 2025–2026 year

ORAL PRESENTATIONS

Facilitating Access to LinkedMusic with SESEMMI: Converting Natural Language Queries to SPARQL with Large Language Models

Digital Libraries for Musicology 2026, *Thessaloniki, Greece* July 2nd, 2026

The Benchmark for Encoding Assessment in Music (BEAM-LLM): Evaluating LLM Performance in Symbolic Music Parsing

Music Encoding Conference 2026, *Tokyo, Japan* May 27th, 2026

The (Formerly) Well-Tempered Classifier: A Symbolic Approach to Performer Identification

Music Graduate Students' Society Symposium 2026, *Montréal, QC* March 21st, 2026

LinkedMusic: May 2025 – Present

LinkedMusic Project Meeting IV, *Montréal, QC* December 13th, 2025

Teaching LLMs Music Theory with In-Context Learning and Chain-of-Thought Prompting: Pedagogical Strategies for Machines

6th Int'l Special Session on Computer Supported Music Education, *Porto, Portugal* April 3rd, 2025

V2Meow: Meowing to the Visual Beat via Video-to-Music Generation

McGill Music Research Club, *Montréal, QC* September 23rd, 2024

Bio-Inspired Music and Design in Elementary Classrooms

Engineering Education Forum 2023, *Calgary, AB* June 1st, 2023

Establishment of Sex- and Site-Specific Normative Data for Adults Using Dual-Energy X-Ray Absorptiometry

McCaig Summer Student Symposium 2022, *Calgary, AB* August 18th, 2022

Establishment of Sex- and Site-Specific Normative Data for Adults Using Dual-Energy X-Ray Absorptiometry

Biomedical Engineering Summer Student Symposium 2022, *Calgary, AB* August 17th, 2022

POSTER PRESENTATIONS

CAMBIATA (Counterpoint and MusicXML By Instructing AI Through APIs): An Experiment in Generating Species Counterpoint with Large Language Models

EuroMAC11: 11th European Music Analysis Conference, *Barcelona, Spain* September 7th, 2026

SESEMMI for LinkedMusic: Democratizing Access to Musical Archives via Large Language Models

1st Workshop on LLMs for Music and Audio, *Daejeon, South Korea* September 26th, 2025

LinkedMusic: Integrating Music Databases with Linked Data

26th Int'l Society for Music Information Retrieval Conference, *Daejeon, South Korea* September 25th, 2025

LANGUAGES

English: Native
French: Advanced (C1, assessed by a DALF examiner)
Italian: Basic (CEFR A2, self-evaluated)

HOBBIES

Rock Climbing · Guitar · Powerlifting · Chess · Fencing · Language Learning