

STEPHEN BRADE

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CV last updated: December 18, 2023

EDUCATION

University of Toronto Sep 2022 -
MSc in Computer Science Toronto, Ontario

- Topic: Designing novel systems that augment human creativity with artificial intelligence
- Supervisors: Tovi Grossman and Sageev Oore

University of Toronto Sep 2017 - Jun 2022
BASc in Engineering Science, Machine Intelligence Toronto, Ontario

RESEARCH PAPERS

- [C3] **S. Brade**, B. Wang, M. Sousa, GL. Newsome, S. Oore, and T. Grossman. *SynthScribe: Deep Multimodal Tools for Synthesizer Sound Retrieval and Exploration*.
Accepted at Intelligent User Interfaces (IUI '24)
- [C2] **S. Brade**, B. Wang, M. Sousa, S. Oore, and T. Grossman. 2023. *Promptify: Text-to-Image Generation through Interactive Prompt Exploration with Large Language Models*. In Proceedings of the 36th Annual ACM Symposium on User Interface Software and Technology (UIST '23). Association for Computing Machinery, New York, NY, USA, Article 96, 1–14. <https://doi.org/10.1145/3586183.3606725>
- [C1] A. Dasgupta, **S. Brade**, L. Sannachi, K. Quiaoit, K. Fatima, D. DiCenzo, L. Osapoetra, M. Saifuddin, M. Trudeau, S. Gandhi, A. Eisen, F. Wright, N. Look-Hong, A. Sadeghi-Naini, W. Tran, B. Curpen, G. Czarnota. *Quantitative ultrasound radiomics using texture derivatives in prediction of treatment response to neo-adjuvant chemotherapy for locally advanced breast cancer*. *Oncotarget* 11, 42 (2020), 3782–3792. <http://dx.doi.org/10.18632/oncotarget.27742>

WORKSHOP PAPERS AND ARTWORK

- [W2] **S. Brade**, B. Wang, M. Sousa, GL. Newsome, S. Oore, and T. Grossman. 2023. *SynthScribe: Deep Multimodal Tools for Synthesizer Sound Retrieval and Exploration*. Workshop on Machine Learning for Creativity and Design (NeurIPS 2023), Dec 16, 2023, New Orleans, USA.
- [W1] D. Oore, A. Staniland, **S. Brade**, B. Wang, M. Sousa, GL. Newsome, T. Grossman, and S. Oore. 2023. *Mythos Synthscribe Remix: Deus in Machina*. Workshop on Machine Learning for Creativity and Design (NeurIPS 2023), Dec 16, 2023, New Orleans, USA.

RESEARCH AND WORK EXPERIENCE

University of Waterloo May 2021 - Aug 2021
Research Assistant Waterloo, Canada

- Mentor: Olga Vechtomova
- Topic: Improving a models generation of lyrics conditioned on music

Advance Micro Devices (AMD) May 2020 - May 2021
Machine Learning Engineer Markham, Canada

- Mentors: Max Kiehn and Yonas Bedasso
- Topic: Designing a tool that visualized a models prediction of regressive code

Sunnybrook Research Institute

Research Assistant

May 2018 - Aug 2018

Toronto, Canada

- **Mentor:** Gregory Czarnota
- **Topic:** Improving prediction of patient responsiveness to chemotherapy via feature engineering of ultrasound images of tumours

AWARDS

Undergraduate Student Research Award

2021

Natural Sciences and Engineering Research Council of Canada (NSERC)

TEACHING AND MENTORING ACTIVITY

Engineering Science Undergraduate Senior Thesis Mentoring

University of Toronto

Sep 2022 - May 2023

- **Shawn Zhang** Generating Audio Stories from Workouts using LLMs.
- **Yviel Castillejos** Comic Generation with Foundation Models.

Teaching Assistant

University of Toronto

Sep 2022 - May 2023

- **ENG286: Literature and Data:** Responsible for running weekly tutorials teaching Python and data science, hosting an office hour, marking of coursework. Fall 2022
- **GGR274: Introductory Computation and Data Science for the Social Sciences:** Responsible for hosting an office hour to help students with Python and data science, marking of coursework. Winter 2023

PROFESSIONAL EXPERIENCE

AI & HCI Workshop Reviewer

International Conference on Machine Learning (ICML)

Apr 2023

MISCELLANEOUS

Musicianship

2015 -

- **Guitar:** 8 years of experience, student of jazz and blues
- **Music Technology:** Strong experience with Max, DAWs, and JUCE
- **Amateur Composer:** [Link to a composition of mine](#)

Languages

- English (Native), Italian (Bilingual)