

# STEPHEN BRADE

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CV last updated: December 13, 2023

## EDUCATION

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### University of Toronto

*MSc in Computer Science*

Sep 2022 -

Toronto, Ontario

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

### University of Toronto

*BASc in Engineering Science, Machine Intelligence*

Sep 2017 - Jun 2022

Toronto, Ontario

## RESEARCH PAPERS

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- [C3] **S. Brade**, B. Wang, M. Sousa, GL. Newsome, S. Oore, and T. Grossman. 2023. *SynthScribe: Deep Multimodal Tools for Synthesizer Sound Retrieval and Exploration*.  
**Under Review at Intelligent User Interfaces (IUI)**
- [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

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- [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

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### University of Waterloo

*Research Assistant*

May 2021 - Aug 2021

Waterloo, Canada

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

### Advance Micro Devices (AMD)

*Machine Learning Engineer*

May 2020 - May 2021

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

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### Undergraduate Student Research Award

2021

Natural Sciences and Engineering Research Council of Canada (NSERC)

## TEACHING AND MENTORING ACTIVITY

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### 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

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### AI & HCI Workshop Reviewer

International Conference on Machine Learning (ICML)

Apr 2023

## MISCELLANEOUS

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### 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)