

Derek Kwan

computers and music

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- Education**
- 2021-present **MSc, Georgia Institute of Technology**, Computer Science
(GPA: 4.00/4.00)
Specialization: Interactive Intelligence
 - 2011-2015 **DMA, State University of New York, Stony Brook**, Music Performance (Percussion)
(GPA: 3.95/4.00)
Advisor: Eduardo Leandro
 - 2008-2010 **MA, Queens College, City University of New York**, Music Performance (Classical Percussion)
(GPA: 3.975/4.00)
 - 2004-2008 **BASc, University of California, Davis**, Music (Percussion) and General Mathematics
(GPA: 3.708/4.00)

- Publications**
- 2021 Alexandre Torres Porres, **Derek Kwan**, Matthew Barber. "Almost 20 years of Cyclone: past, present, and future". Revista Vortex 9 (2), 2021. <https://doi.org/10.33871/23179937.2021.9.2.15>
 - 2021 Anne Sophie Andersen, **Derek Kwan**. "Grisey's 'Talea': Musical Representation As An Interactive 3D Map". New Interfaces for Musical Expression (NIME), 2021. <https://nime.pubpub.org/pub/oiwz8bb7/release/1?readingCollection=71dd0131>
 - 2020 Sofy Yuditskaya, Sophia Sun, **Derek Kwan**. "Karaoke of Dreams: A multi-modal neural-network generated music experience". Joint Conference on AI Music Creativity (CSMC + MuMe), 2020. https://boblsturm.github.io/aimusic2020/papers/CSMC_MuMe_2020_paper_5.pdf
 - 2016 Alexandre Torres Porres, **Derek Kwan**, Matthew Barber. "Cloning Max/MSP Objects: a Proposal for the Upgrade of Cyclone". Proceedings of the Fifth International Pure Data Convention (PdCon), 2016. https://derekxkwan.com/res/pdcon16_cyclone-paper.pdf

- Presentations and Workshops**
- 2021 **Karaoke of Dreams: A multi-modal neural-network generated music experience**, online recorded virtual paper presentation with Sofy Yuditskaya and Sophia Sun for McGill Music Graduate Symposium (online)
 - 2020 **TidalCycles Live Coding Workshop**, Bombay Beach, CA
workshop at Mars College on the TidalCycles Live Coding Environment
 - 2018 **socketMusic: wireless**, Lewiston, ME
presentation and performance of new revision of my composition for improvised percussion, electronic sound, and mobile devices at Bates Digital Music Symposium

- Teaching**
- 2017 **Temporary Lecturer**, Music 107A: Introduction to Electronic Music I, UC Davis
overview of electronic music history, recording studio basics, and fixed-media composition

- Other Professional Experience**
- 2020-2021 **Music and Digital Art Curator, Art Music Lit Space**, online
write content (curation and exhibition statements) for the virtual exhibition space
 - 2013-2015 **Lab Assistant and Programmer, SBU Teaching Learning Lab**, Stony Brook NY
Working under Paul St. Denis with SBU faculty on interactive digital media projects investigating novel methods of human-computer interaction and full-stack web application development for class-oriented learning tools and data visualization
 - 2013 **Audio/Video Collections Manager, SBU Music Library**, Stony Brook, NY
Archival activities for the music library's analog and digital media

	2012-2013	Graduate Assistant, SBU Computer Music Studio , Stony Brook, NY Live sound reinforcement and technology management for music department concerts and setting up and running a new campus recording studio (supervisors: Margaret Schedel, Daniel Weymouth)
	2011-2012	Graduate Assistant, SBU Contemporary Chamber Players , Stony Brook, NY Organization and planning of concerts and rehearsals (supervisor: Eduardo Leandro)
	2010-2011	Private Instructor in Percussion (freelance) , Flushing, NY Taught private lessons in percussion to students ranging from high school students to adults
Fellowships and Residencies	2022	Composer Residency, Virginia Center for the Creative Arts , Amherst, VA
	2020	Project Participant and Contributor, Art-a-Hack Dancedemic , New York, NY / online remote hackathon in conjunction with Battery Dance Festival
	2010	Performance Fellow, Bang on a Can Summer Music Institute , North Adams, MA
	2008	Performance Fellow, soundSCAPE Composer and Performance Exchange , Pavia, Italy
	2007	Performance Fellow, International Marimba Festival , Salzburg, Austria
Exhibitions	2020	Small File Media Festival , Vancouver, BC glitch video bombaybeach featured at online festival
	2019	Music Makers Art Exhibition at Hacker Lab , Sacramento, CA featuring my computer-generated visual art studious overachieving , polyhealth , and catmoticon portraits alongside other visual art by musicians
	2019	The Brickhouse Art Gallery , Sacramento, CA month-long curation of work alongside work by Tavarus Blackmon and Boris Allenou
Honors and Awards	2008	Phi Beta Kappa, University of California, Davis
Relevant Graduate Coursework		Georgia Tech Machine Learning (in progress) Artificial Intelligence Knowledge-Based AI Computer Vision Robotics: AI Techniques Human-Computer Interaction Educational Technology Computer Networks Software Development Process (in progress)
Projects	2022	Rhythm OLMITS an intelligent tutoring system for teaching musical rhythm performance originally developed for Georgia Tech's EdTech class (paper: https://smartech.gatech.edu/handle/1853/67085 , code: https://github.com/derekxkwan/rhythm_olmits)
Skills		General programming - Python , (Scikit-learn, Numpy, Matplotlib, OpenCV), C , Java , JavaScript , (Node.js, Electron, React) Audio programming - Pure Data , SuperCollider , TidalCycles , various DAWs , (Logic, Ardour) Other creative computing - Processing , basic physical computing with Arduino Git , daily use of Linux