Derek Kwan

computers and music

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Education

2021-present **MSc, Georgia Institute of Technology**, Computer Science
Specialization: Interactive Intelligence

2011-2015 **DMA, State University of New York, Stony Brook**, Music (percussion)
Advisor: Eduardo Leandro

2008-2010 **MA, Queens College, City University of New York**, Music (Percussion)

2004-2008 **BASc, University of California, Davis**, Music (Percussion) and General Mathematics

Publications

2021 Alexandre Torres Porres, **Derek Kwan**, Matthew Barber "Almost 20 years of Cyclone: past, present, and future". Revista Vortex 9 (2), 2021. http://200.201.12.34/index.php/vortex/article/view/4553

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". 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**
recorded virtual paper presentation with Sofy Yuditskaya and Sophia Sun for McGill Music Graduate Symposium (online)

2020 **TidalCycles Live Coding Workshop**
workshop at Mars College on the TidalCycles Live Coding Environment (Bombay Beach, CA)

2018 **socketMusic: wireless**
presentation and performance of new revision of my composition for improvised percussion, electronic sound, and mobile devices at Bates Digital Music Symposium (Lewiston, ME)

Teaching

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

Other Professional Experience

2020-2021 **Music and Digital Art Curator, Art Music Lit Space**, online
write content (statements on curated art, exhibition statements) for the virtual exhibition space

2013-2015 **Lab Assistant and Programmer, SBU Teaching Learning Lab**, Stony Brook NY
Working 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 Colletions 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

Running live sound reinforcement and technology management for music department concerts and setting up and running a new campus recording studio

2011-2012 **Graduate Assistant, SBU Contemporary Chamber Players**, Stony Brook, NY
Assist with the organization and planning of concerts and rehearsals

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)

Skills

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**