DEREK KWAN

Computers / Music / Art
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EDUCATION

- 2021 - 2023 (anticipated): Georgia Institute of Technology (Atlanta, GA)
  - Master of Science: Computer Science (specialization: Interactive Intelligence)
  - Classes Taken: Human-Computer Interaction, Robotics: AI Techniques, Artificial Intelligence, Computer Vision, Computer Networks, Knowledge-Based AI, Educational Technology, Machine Learning (in progress), Software Development Process (in progress)
- 2011 - 2015: State University of New York, Stony Brook (Stony Brook, NY)
  - Doctor of Musical Arts: Music (Percussion)
- 2008 - 2010: Queens College, City University of New York (Flushing, NY)
  - Master of Arts: Music (Percussion)
- 2004 - 2008: University of California, Davis (Davis, CA)
  - Bachelor of Arts and Science: Music (Percussion) and General Mathematics

PRESENTATIONS / WORKSHOPS

- June 15-16, 2021: New Interfaces for Musical Expression 2021 (NYU Shanghai)
  - question and answer session with Anne Sophie Andersen on our 3D visualization work of Grisey's Talea using web technology
- March 14, 2021: McGill Music Graduate Symposium
  - recorded virtual paper presentation of "Karaoke of Dreams: A multi-modal neural-network generated music experience" with Sofy Yuditskaya and Sophia Sun
- October 20, 2020: CSMC + MuMe - 2020 Joint Conference on AI Music Creativity
  - YouTube stream of paper presentation of "Karaoke of Dreams: A multi-modal neural-network generated music experience" with Sofy Yuditskaya and Sophia Sun
- March 2, 2020: TidalCycles Live Coding Workshop (Bombay Beach, CA)
  - Workshop at brahman.ai on the TidalCycles Live Coding Environment
- October 27, 2018: Bates Digital Music Symposium (Lewiston, ME)
  - presentation and performance of Derek Kwan - socketMusic: wireless (new 2018 revision) for improvised percussion, electronic sound, and mobile devices
- November 19, 2016: Fifth Internatitonal Pure Data Convention
  - Presentation of "Cloning Max/MSP Objects: a Proposal for the Upgrade of Cyclone" with Alexandre Torres Porres and Matt Barber

PUBLICATIONS

- 2021: "Almost 20 years of Cyclone: past, present, and future" - with Alexandre Torres Porres and Matt Barber (Revista Vortex 9 (2))
- 2021: "Grisey's 'Talea': Musical Representation As An Interactive 3D Map" - with Anne Sophie Andersen (NIME)
- 2020: "Karaoke of Dreams: A multi-modal neural-network generated music experience" - with Sofy Yuditskaya and Sophia Sun (CSMC + MuMe)
- 2016: "Cloning Max/MSP Objects: a Proposal for the Upgrade of Cyclone" - with Alexandre Torres Porres and Matt Barber (PdCon)

TEACHING EXPERIENCE

- September 2017- December 2017: University of California, Davis Department of Music (Davis, CA)
  - Temporary Lecturer
  - Teaching the undergraduate course Music 107A: "Introduction to Electronic Music I" featuring a general overview of electronic music history (musique conrcète, elektronische musik, soundscape composition, etc.) and studio basics (sound editors, DAWs, microphones, mixers, speakers, etc.) with a focus on fixed-media composition

OTHER PROFESSIONAL EXPERIENCE

- April 2020 - February 2021: Art Music Lit Space (https://art-music-lit.space)
  - music/digital art curator for the virtual exhibition space
  - write content (statements on curated art, exhibition statements, etc.) for the exhibition website
  - help organize the virtual receptions and other events
  - manage the Twitter account
- September 2013 - August 2015: Stony Brook University Teaching Learning Lab (Stony Brook NY)
  - Lab Assistant/Programmer
  - Worked with faculty on interactive digital media projects (Max/MSP/Jitter, Pure Data/GEM, Processing, SuperCollider, etc.) investigating novel methods of human-computer interaction (webcam, Kinect, NeuroSky MindWave, etc.) Full-stack web application development (PHP, AngularJS, jQuery, etc.) for class-oriented learning tools and data visualization
- July 2013 - December 2013: Stony Brook University Music Library (Stony Brook, NY)
  - Audio/Video Collections Manager
  - Archival and reproduction of the music library's analog and digital media
  - Oversaw music library technology (computer carrels, smart-board-equipped conference room, etc.)
- August 2012 - August 2013: Stony Brook University Computer Music Studio (Stony Brook, NY)
  - Graduate Assistant
  - Live sound reinforcement and technology management for music department concerts
  - Setup and run a new campus recording studio
- August 2011 - June 2012: Stony Brook University Contemporary Chamber Players (Stony Brook, NY)
  - Graduate Assistant (Stony Brook, NY)
  - Assist with the organization and planning of concerts and rehearsals
- September 2010 - July 2011: Private Instructor in Percussion (Flushing, NY)
  - Freelance
  - Taught private lessons in percussion to students ranging from high school students to adults

EXHIBITIONS

- 2020: Small File Media Festival (Vancouver, BC)
  - a festival dedicated to small files featuring my video bombaybeach
- 2019: Music Makers Art Exhibition at Hacker Lab (Sacramento, CA)
  - Featuring art made by musicians featuring my computer-generated visual art
- 2019: The Brickhouse Art Gallery (Sacramento, CA)
  - Month-long curation of art by Derek Kwan, Tavarus Blackmon, and Boris Allenou

FELLOWSHIPS / RESIDENCIES

- 2022: Virginia Center for the Creative Arts (Amherst, VA)
  - composer residency

- 2020: Art-a-Hack Dancedemic (New York, NY / remote)
  - remote hackathon in conjunction with Battery Dance Festival
- 2020: Bombay Radical Artificial Humanist Media Arts Nexus (Bombay Beach, CA)
- 2010: Bang on a Can Summer Music Institute (North Adams, MA)
  - Performance Fellow
- 2008: soundSCAPE Composer and Performance Exchange (Pavia, Italy)
  - Performance Fellow
- 2007: International Marimba Festival (Salzburg, Austria)
  - Performance Fellow

HONORS

- 2008: Phi Beta Kappa (University of California, Davis)

TECHNICAL PROFICIENCIES

General Software Development: Proficient in Python (familiar with Numpy, Scikit-learn, OpenCV, Matplotlib, NetworkX); experience in C, Java. **Web Technologies:** HTML, CSS, JavaScript, Node.js/Express, Electron, ClojureScript, React, PHP. **Digital Audio Workstations:** Logic, Ableton Live, Ardour. **Interactive Media Programming Languages:** Pure Data (including external development in C), SuperCollider, Max/MSP, Processing, p5.js, Three.js, Tone.js, TidalCycles. **Basic 3D Modeling:** Blender. **Basic Physical Computing:** Arduino, Raspberry Pi. **Audio Engineering:** Studio and Live Recording, Live Sound Engineering. **Music Engraving Software:** LilyPond. **Other:** Git, Linux, LaTeX.