

Education

Doctor of Philosophy, Music Composition (ABD)	Expected 2021
University of California, Santa Barbara	
Master of Science, Media Arts & Technology	Expected 2020
University of California, Santa Barbara	
Master of Arts, Music Composition	2019
University of California, Santa Barbara	
Committee: Clarence Barlow, Curtis Roads, Ben Levy	
Bachelor of Arts, Interdisciplinary Major in Music and Psychology (with distinction)	2013
St. Thomas University, Fredericton, NB, CAN	

Principal Teachers

<i>Composition</i>		<i>Programming</i>	
João Pedro Oliveira	2020 –	Andres Cabrera	2019 –
Andrew Tholl	2017 –	Karl Yerkes	2017 – 2018
Curtis Roads	2016 –	Clarence Barlow	2016 – 2017
Clarence Barlow	2016 – 2019		
Martín Kutnowski	2009 – 2013		

Secondary Teachers (Masterclasses, Workshops, Lessons)

Douglas Quin	Field Recording	Bogong Centre for Sound Culture
Philip Samartzis	Field Recording	Bogong Centre for Sound Culture
Alvise Vidolin	Live Electronics	Accademia Musicale Chigiana
Nicola Bernardini	Live Electronics	Accademia Musicale Chigiana
Annette Vande Gorne	Acousmatic Composition	Musiques & Recherches
Hans Tutschku	Acousmatic Composition	Musiques & Recherches
Ludger Brümmer	Composition	UC Santa Barbara
Elainie Lillios	Composition	UC Santa Barbara
Alfredo Coral	Conducting	St. Thomas University

Awards, Grants and Fellowships

2020	ASCAP/SEAMUS Award Finalist <i>Dimensionless</i>
2019	Summer Culture and Community Grant <i>UCSB Summer Music Festival</i> Dorothy and Sherrill C. Corwin Award for Excellence in Composition <i>1st prize in Percussion category for Sisyphe Heureux</i> Dorothy and Sherrill C. Corwin Award for Excellence in Composition <i>2nd prize in Electroacoustic category for Glossopoeia</i> Special Fricker grant <i>Research Stipend</i>

Awards, Grants and Fellowships (cont.)

- 2018 **International Doctoral Recruitment Fellowship**
Summer Cultural and Enrichment Grant
UCSB Summer Music Festival
Special Corwin Grant
UCSB Summer Music Festival
- 2017 **The Peter Racine Fricker Fellowship for Studies in Composition**
UCSB Regents Departmental Fellowship
International Doctoral Recruitment Fellowship
Special Fricker grant
Research Stipend
- 2016 **The Peter Racine Fricker Fellowship for Studies in Composition**
UCSB Regents Departmental Fellowship

Academic Appointments

- 2018-2020 **Teaching Assistant – Digital Audio Montage** (Instructor of Record: Curtis Roads)
University of California, Santa Barbara
- Teaching Assistant for full year course divided into 3 10-week courses (Electronic Music: History & Aesthetics, Sequencing & Synthesis, and Sound Transformation).
 - Giving lessons on the concepts, techniques, and history of electronic music and digital recording. Facilitating group lab sessions in electronic composition. Giving one-on-one composition lessons.
 - Received repeat appointment in 2019-2020 academic year.
- 2010-2012 **Tutor – Music Department**
St. Thomas University
- Tutoring on music theory and composition in group and one-on-one contexts.
- Tutor – Psychology Department**
St. Thomas University
- Tutoring for Freshman Psychology students according to needs.

Professional Activities

- 2017-present **CREATE Technical Coordinator**
University of California, Santa Barbara
- Lead engineer and technical director for all CREATE concerts (4 concerts per year). Concerts always in 8-channel, often involving complex routing and live electronics.
 - Manager of 3 electronic music studios. Responsible for access control as well as maintenance and upgrades of software, hardware, and facilities.
- 2019 **Co-Artistic Director – UCSB Summer Music Festival**
University of California, Santa Barbara
- Helped organize 2-day festival featuring 11 distinct events (10 concerts, 1 exhibition) showcasing diverse musical traditions and interdisciplinary collaborations.
 - Responsibilities included consulting (for other festival organizers), concert programming, financial direction (grant writing, budgeting, negotiating), and booking venues.
- A1 Engineer – Alliance of Women in Media Arts and Technology Conference**
University of California, Santa Barbara
- Lead audio engineer for all conference concerts

Professional Activities (cont.)

- 2018 **Executive Director – UCSB Summer Music Festival**
University of California, Santa Barbara
- Executive Director of 2-day festival featuring 10 distinct events (9 concerts, 1 exhibition) in traditional and non-traditional spaces.
 - Responsible for the entire planning and execution of the festival.
 - Specific responsibilities included artistic direction (program planning, hiring artists), financial direction (grant writing, budgeting, negotiating), and technical direction (booking venues, production, execution).
- Technical Director – Alliance of Women in Media Arts and Technology Conference**
University of California, Santa Barbara
- Lead audio engineer and technical director for all conference concerts and talks
- 2017 **Composition Forum Coordinator**
University of California, Santa Barbara
- 2016 **Research Assistant – Freshman Seminars**
University of California, Santa Barbara – Supervisor: Clarence Barlow
- Producer – Bending Light (Tactus)**
- Vocal engineer and producer for full-length progressive metal album *Bending Light* by Tactus
 - Vocal Editing using Melodyne
- 2014 **Producer – T (Tactus)**
- Vocal engineer and producer for progressive metal EP *T* by Tactus
 - Vocal Editing using Melodyne
- 2012 **Lab Assistant – Psychology Department**
St. Thomas University
- 2010 **Research Assistant – Music Department**
St. Thomas University – Supervisor: Martín Kutnowski

Conference Presentations and Guest Lectures

- Nov 8, 2019 NowNet Arts Conference 2019
- Performance: *Trans-Pacific Concert between University of California Santa Barbara and the ElderConservatorium of Music in Adelaide*
 - Co-Presenters: Ken Fields, Elder Conservatorium network ensemble, UCSB network ensemble
- May 2, 2019 Sound + Science Symposium 2.0, UCLA
- Performance and Panel: *“Artsmesh Network Music Performance and Discussion”*
 - Co-Presenters Ken Fields, Joel Ong, Gil Kuno
- Oct 30, 2018 Art22: Introduction to Programming for the Arts, UCSB
- Guest Lecture: *“Coding as Compositional Process”*
- Aug 8, 2018 International Computer Music Conference, Daegu, South Korea
- Performance: *Bachflip*

Primary Research and Artistic Interests

New techniques for synthesis and sound transformation, microtonality, algorithmic music, mathematical and physical metaphors in music, classical and quantum mechanics, human-computer interaction & interface design

Professional Affiliations

ASCAP, ICMA, SEAMUS

Proficiencies

Composition

For orchestral instruments, for electronics (live and fixed), for mixed (electronic-acoustic), for film, for stage, for popular styles/genres

Languages

Spoken: English, French

Computer: C++, Python, Rust, HTML, Pure Data, Max/MSP, Bash, Processing(Java)

Software

DAWs: Logic Pro, Pro Tools, Ableton Live, Ardour, Audacity, Reaper

Notation: Lilypond, MuseScore, Sibelius

Specialized: Melodyne, SPEAR, Metasynth, Audiosculpt, GIMP, KDenlive

Production

Studio: Recording, mixing, editing, post-production, studio construction/maintenance and management

Live: Multi-channel concert design and execution, live electronics, live diffusion, live spatialization

Other

Acoustics, sound design, DSP, music engraving (Lilypond), web design, HCI (GUI Design), calculus, psychology, computer networking

List of Works & Performances

2019 **Dimensionless**

2-channel fixed media

Finalist for ASCAP/SEAMUS Award 2020

August 2019: Rodney DuPlessis (live diffusion on the Musiques & Recherches Acousmonium), Influx Summer Festival, Brussels, Premiere

Mysterium Cosmographicum

2-channel Audio and Oscilloscope

August 2019: UCSB Summer Music Festival 2019, Santa Barbara

June 2019: MAT End of Year Show, Santa Barbara

March 2019: First Thursday @ SBCAST, Santa Barbara, Premiere

2018 **Sisyphe Heureux**

for percussion quartet and electronic playback

1st prize Dorothy and Sherrill C. Corwin Award in Percussion category

August 2018: Los Angeles Percussion Quartet, Santa Barbara, Premiere

Follow the Lieder

for viola and live electronics

Premiere forthcoming

Disconnect

for saxophone and HASGS (Hybrid Augmented System of Gestural Symbiosis)

November 2018: Henrique Portovedo, I Encontro de LiveLoopists, Aveiro, Portugal

June 2018: Henrique Portovedo, ICLI 2018, Porto, Portugal

March 2018: Henrique Portovedo, Santa Barbara, Premiere

Quinto Suono

for string quartet

January 2018: Formalist Quartet, Santa Barbara, Premiere

List of Works & Performances (cont.)

2017 **2fl v –2fl**

for flute duo

August 2017: Adriane Hill and Cynthia Vong, Santa Barbara, Premiere

BachFlip

4-channel fixed media

August 2018: International Computer Music Conference (ICMC) 2018 at Daegu, Korea

June 2017: Santa Barbara, Premiere

Feedback

for double bass and live electronics

May 2017: Scott Worthington, Santa Barbara, Premiere

2016 **Glossopoeia**

2-channel fixed media

2nd prize Dorothy and Sherrill C. Corwin Award in Electroacoustic category

April 2018: CEMEC, CCRMA/Stanford

April 2018: CEMEC, Santa Barbara

November 2017: CREATE presents: Sound Resistance, Santa Barbara, Premiere

Surface Tension

4-channel fixed media

April 2017: CEMEC, Mills College

April 2017: CEMEC, San Diego, Premiere

Bending Light (collaborators: Adrian Barnes, Alec Dobbelsteyn, Ben Maclean)

for progressive metal quintet

January 2017: Tactus, Fredericton, Premiere

October 2016: Tactus, Worldwide, digital and physical album release

Back to Zero

original score and sound design (Theatre)

March 2016 (4 shows): Next Folding Theatre Company, Fredericton, Premiere

The Bacchae

original score and sound design (Theatre)

February 2016 (4 shows): Theatre St. Thomas and The Coop, Fredericton, Premiere

2015 **Memory of a Rêverie**

for orchestra

December 2015: Yokohama Youth Orchestra, Yokohama, Reading

Trudeau and the FLQ

original score and sound design (Theatre)

November 2015 (5 shows): Theatre St. Thomas, Fredericton, Premiere

2014 **The Taming of the Shrew**

original score and sound design (Theatre)

November 2014 (5 shows): Theatre St. Thomas, Fredericton, Premiere

Rêverie

for piano, flute, and cello

June 2014: Windsor University Trio, Fredericton, Premiere

T (collaborators: Adrian Barnes, Alec Dobbelsteyn, Ben Maclean)

for progressive metal quintet

June 2014: Tactus, Fredericton, Premiere

List of Works & Performances (cont.)

- 2013 **Chimes**
fixed media installation
November 2013: Fredericton, Premiere
- 2012 **Elements**
for piano
- 2011 **Kosala & Maghada**
clarinet concerto with violin, viola, and cello
- 2010 **Upon Lonely Seas**
for string quartet
December 2010: Eurodam String Quartet, The Caribbean Sea, Reading

Original Software & Programs

PulsarD (Pure Data)

An implementation of Pulsar Synthesis as described in “Composing with Pulsars” (Roads, 2000) in Pure Data. Features include loading an arbitrary waveform as a pulsaret, versatile enveloping, real time control over fundamental and formant frequencies, sync or phase-locking, and a masking input that accepts a binary list as a masking pattern (numbers between 1 and 0 can also be given for partial masking).

Sieves [revised version, 2019] (C) Collaborator: Curtis Roads

Originally written in BASIC by Iannis Xenakis and later translated to C by Gérard Marino, the entire code was written out in chapter XII of *Formalized Music* (Xenakis, 1990). However, the code relied on deprecated libraries and contained other errors, so we revised and adapted the code to work with C standard libraries and submitted the revised program to the Centre Iannis Xenakis for preservation.

Xieves (Pure Data)

An implementation of Xenakis’ Sieve technique of series generation in Pure Data. The versatility of the Pure Data environment allows the output of the object (a number series) to be used in a myriad of constructions from scales and harmonies to rhythmic patterns and envelopes; anything that can accept a sequence of integers. In addition, this program expands on the original sieve software designed by Xenakis (1990) by allowing for the then-unfeasible ability to realize Xenakis’ conception of *metabolae* (transformations of the sieve) in real time.

PISCES: Pisces Interactive Spectral Compression Engine & Synthesizer (C++)

An original program for realizing my concept of Spectral Dilation, a process whereby the power of a spectrum is pulled toward or repelled from a chosen frequency. This software has two modes: one allows the user to construct a synthesized spectrum through additive synthesis, and the other allows real-time manipulation of an audio stream.