# Boyer College of Music and Dance

# MUSIC STUDIES DEPARTMENT FALL 2021 GRADUAND FORUM

# MUSIC STUDIES DEPARTMENT

Chairman, Dr. Edward Latham

Tuesday, December 7, 9:00AM Presser Hall, Room 140 2001 N. 13<sup>th</sup> Street Philadelphia, PA 19122



# **JEWEL BOX**

# A COLLABORATIVE MUSIC PRODUCTION PORTFOLIO

# NICHOLAS KRUSE, B.S. MUSIC TECHNOLOGY ADVISOR: DR. ADAM VIDIKSIS

I still remember the thrill of recording a band for the first time. It was the summer before my sophomore year of high school. My friends and I foraged whatever recording gear we could find to make the tape. Our kick mic was being held up by a stack of books and our guitar mics were dangling in front of the amps because we couldn't find enough mic stands. I was situated with a laptop and a mixer, and despite my 16 inputs I could only record the stereo-out from the mixer onto my computer. It probably took 50 takes to get a recording we were happy with due to the circumstances, but the room was buzzing with energy the whole time. I didn't know it then, but I was building the foundational skills for what would end up becoming my greatest passion and dream. Now, I am fully invested in becoming a music producer. I've spent the past two years working with artists from across the world, building up my network and honing my craft.

I have created a portfolio of four completed songs with artists Kevin Walkman and Splendi. Each song has a different story, theme, and sound, but they all are tied together by my style of production. The foundation of all these projects is Logic Pro X, where I co-wrote, produced, mixed, and mastered them. To make these songs, I used bass guitar, electric and acoustic guitar, drum samples from Splice, a Moog Sub Phatty, and software instruments such as Serum, Arturia, ANA. For sound design, production, and mixing I used audio tools from Waves, Universal Audio, iZotope, Soundtoys, Valhalla, and Slate Digital. For vocals and live instrument recording needs I used my Universal Audio Apollo x4, combined with microphones like the Shure SM7B (paired with a cloudlifter), Soundelux e251, and an SM57. The portfolio was produced in my bedroom, with some recording and mixing in the Boyer studio. I also practiced skills learned in my Music of Business elective to negotiate payments, release schedules, and marketing for each song. Through this process, I have refined my technical skills as an audio engineer and producer, but have also developed personal and industry skills such as session etiquette, business negotiation, and working with an attorney. Now more than ever, I feel prepared to take on my professional life and pursue music production full-time.



NICK KRUSE is a multi-instrumentalist music producer, songwriter, and audio engineer currently based in Philadelphia, PA. Living by the phrase "less is more," he likes to create music using space and texture, with an emphasis on creative sound-design. As a bassist, his earlier work was focused around a connection between the drums and bass, but as he continues to grow as a musician his music has become more experimental, using detuned synths, fuzzy guitars, and creating drums out of anything. Nick has co-written and produced seven songs since 2019 which have accumulated over 4 million streams.



### PHENOMFLUTE

# AN EXTENDED VIRTUAL FLUTE PLUGIN

# REBECCA PIERRE, B.S. MUSIC TECHNOLOGY ADVISOR: DR. ADAM VIDIKSIS

PhenomFlute is a virtual flute plugin that can manipulate flute sounds that extend beyond what a typical flute can do. The plugin features different articulations, vibrato, whistle and vocal parameters, as well as a selection of waveform, oscillator, and noise parameters. A graphical user interface (GUI) was designed for this plugin to be used in digital audio workstations (DAWs). PhenomFlute was created using Cabbage, a framework for audio software development that uses the Csound audio synthesis language. This plugin is intended to be used as a software instrument in any DAW that supports Virtual Studio Technology (VST) or Audio Units (AU) formats.

The flute, whistle, and vocal samples used in *PhenomFlute* were recorded in the Boyer College Recording Studio. These samples were edited and converted into sound files that can be read by the Csound coding language. In Cabbage, these sound files were loaded into the plugin and assigned to presets that can be read by a virtual keyboard. Several virtual instruments were coded into *PhenomFlute* to create its unique parameters. The waveform, oscillator, and noise parameters were created with operation codes built into Csound. From Cabbage, this plugin was exported in both the VST and AU formats for the creative demonstrations in this presentation, which were recorded in Ableton Live and Logic Pro.





REBECCA PIERRE is a senior Music Technology student at Temple University from Wilmington, Delaware. In the past four years at Temple, she has participated in and collaborated on various musical performance projects both inside and outside of school. In February 2021, Pierre produced and engineered the extended play "New Normal" by local punk rock band Bad Smidgen. In August 2021, she collaborated on the single "His Eyes Are on You" as a part of the worship collective: "moment. Worship." As a part of the Boyer Electronic Ensemble Project, Pierre collaborated with the Temple Dance Ensemble for a performance in the SEAMUS 2021 Digital Conference. She also collaborated on a project entitled "Vagina Chorus" that was performed at the Barnes Foundation this past November. Pierre has been a member of the Temple University Diamond Marching Band and Collegiate Band where she played piccolo and flute respectively.



### **CUT LIFE CABLES**

# ALEX TRIDICO, B.S. MUSIC TECHNOLOGY ADVISOR: DR. ADAM VIDIKSIS

The project *Cut Life Cables* consists of multiple songs, each of which has a focus on a certain type of music technology originating from a different medium. The songs are intended to represent a timeline of my own life and the various emotions I have felt at specific times over my teenage years into my early 20's. This is shown either texturally, melodically, or lyrically throughout *Cut Life Cables*. Just as I've acquired more knowledge of music creation and more equipment over the years, I've experienced more and more of what life has to offer. The main creative element in each song utilizes virtual instruments, hardware instruments (such as analog/digital synthesizers, drum machines and sequencers), sample manipulation and plunderphonic techniques. Additionally, I created multiple songs that combine a few of these various technologies in order to showcase how they can be used to complement each other.

Limiting your musical options can often produce greater creativity. This became clear to me as I created the track focusing on hardware synthesizers and drum machines. If I was producing a song with techniques I more commonly use, I would have utilized MIDI quantization on the melodic pads/melodies to keep myself on rhythm. I would have also grabbed an 808 from my sample library for a low-end bass. In limiting myself to only hardware outside my computer, I was forced to practice each part before recording and delve deeper into each instrument, tweaking and adjusting various parameters until I felt happy with the results. After completing this process, I felt as though I had produced a more customized sound, leading to instruments which greatly complimented each other.

One of the core beliefs I've come to hold over the years is that you don't need more and more expensive hardware/software to make/mix music into a quality piece of art which others enjoy. There are certain necessities depending on the type of music you make/mix, but once that "barrier of entry" is passed, knowledge of how to utilize what you own or have access to is infinitely more important than participating in unnecessary consumerism. It is difficult for anyone working

professionally in this field to limit their consumption. Consumerism permeates the music industry, constantly promoting new flashy products, requiring software updates or forcing replacements via planned obsolescence. Even given this necessity to engage with equipment, it is important to be self-aware when browsing new technology so you can limit your purchases to those that are needed or useful, thereby limiting your engagement with consumerism. By focusing on specific equipment and techniques in each song, I hope to show that the modern artist can create with limitation by circumstance or limitation by choice.



ALEX TRIDICO is a multi-instrumentalist, music producer, and audio engineer based in Philadelphia, currently completing his Bachelor of Science degree in Music Technology at Temple University. Tridico has produced and released multiple collections of songs on Spotify, Apple Music, Soundcloud and other streaming services under the pseudonym "Idle Caption". He has been involved in many different music collaborations and ensembles including various bands with his friends, the Temple University Choral and BEEP (Boyer College Electroacoustic Ensemble Project), directed by Dr. Vidiksis. Prior to the pandemic, Tridico has also worked on beat production and mixing/mastering for various artists in the local Philadelphia area. Tridico has been passionate about recording and producing music since he first got a laptop and microphone at an early age. He intends to continue this on this path of production, recording and audio engineering in his future career.

# THE SONIC MUDFISH

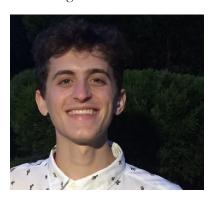
# ERRANT MACHINE LEARNING FOR REACTIVE GENERATIVE SYNTHESIS

# JONAH PFLUGER, M.S. MUSIC TECHNOLOGY ADVISOR: DR. ADAM VIDIKSIS

Computer-based technology has become a ubiquitous part of the music making process. In almost every case, a person uses a machine to carry out specific tasks. From music engraving applications to digital audio workstations, many digital music tools rely on a human-dominant model of interaction. With this approach, one learns to use the computer in a similar manner to which one might use a hammer or a wrench, that is, as a tool to idiomatically address an aspect, or multiple aspects, of a perceived need (in this case, a creative practice). There is nothing wrong with this approach—it works—however, it does not accommodate the possibility of an enhanced sense of collaboration with our computational tools. Moreover, it suggests that one might only desire to use computational tools for the purposes of recreating already established modes of performance practice and distributed labor within the creative process. Such an approach discounts the unique opportunities that music technology provides for suggesting alternative approaches in the sonic arts, in which computational resources can serve as tools as well as collaborators in the creative process. Though true artificial intelligence (AI) and machine learning (ML) are decades (or perhaps centuries) away, creative application of AI and ML-aligned mathematical processes can produce compelling creative resources in the context of new musical instrument design.

For this project, I have built a hardware-based synthesizer and audio processor - called the Sonic Mudfish - designed for use in non-idiomatic electroacoustic improvisation. Through machine listening and derived data processing of audio input and/or internally synthesized data, the Mudfish functions through excitation of a 2-3-1 perceptron algorithm, a simple form of neural network. Through this level of interactivity, the system alters audio effects parameters and generative music structures to gain a level of reactivity. In this way, the system often takes unexpected improvisational turns, from ambient

soundscapes to harsh noise walls, and acts as a sonic collaborator. Given that this machine is not truly intelligent, but merely a reactive agent, its code, construction, and functionality make up a device somewhere between malleable tool, musical instrument, sonic collaborator, and sonorous digital structure.



JONAH PFLUGER is a sound artist and musician completing an MS in Music Technology at Temple University. Jonah's research currently centralizes around new musical instrument design. As an audio engineer, Jonah has worked on audio/event production teams supporting artists such as Christian McBride, John Zorn, and Roscoe Mitchell, in addition to working in theater extensively, as a sound designer and pit musician (electric bass). More recently, Jonah has worked as an assistant programmer for The KATA Project, as a Technical Assistant on *The Floods*, as Lead Engineer for *Zalon Arts*, and as an Associate Technical Director for the SEAMUS 2021 Virtual National Conference. Jonah currently holds the position of Adjunct Assistant Professor and Audio Technology Support Specialist at The University of the Arts in Philadelphia, PA.



# INTERNSHIP PRESENTATION

# ZACHARY EISENGREIN, B.S. MUSIC

The first time I stepped onto the football field, lined with dots and hashes not for those in protective armor, but rather for those flaunting shiny instruments and brilliantly colored uniforms, I knew it was a place I belonged. Despite never having marched prior to joining Temple University's Diamond Marching Band, the yard lines quickly became a familiar retreat for escaping stress. As the years progressed, I found myself as more than just a dot on the drill chart, and rather committed to roles including Trumpet Section Leader and Drum Major. Suddenly, I was no longer just a performer, I was someone who had the motivation, skills, and experience to influence the band's success. These roles have cultivated a love for teaching music, driving me to pursue a Master's in Music Education in Fall 2022. To prepare myself for professional coursework and a future career, I have completed internships that have broadened my horizons beyond the marching band setting, kickstarting interactions with many people of differing backgrounds, interests, and musical abilities. This semester, I sang with the St. Thomas at Villanova choir on Sundays and the Main Line Singers Choir on Wednesday nights, both under the direction of Dr. Latham. I've also worked with the Youth Orchestra of Bucks County and learned how to construct effective warm-ups pertaining to wind, percussion, and string instruments alike. Finally, I have enrolled in the local New Groove Music Studio's "Music Entrepreneurship and Leadership Development" (MELD) program, where I am learning the fundamentals of musical freelancing and business, as well as teaching as a musical artist.





ZACHARY EISENGREIN is a 5th-year senior in his final semester of study in the Bachelor of Science in Music program at Temple. A trumpet player at heart, but presently an emerging conductor, educator, and marching band enthusiast, Zach commits himself to learning and leading through integrity, passion, and perseverance - all skills he has learned through his endeavors at Temple. He began his musical journey with the Youth Orchestra of Bucks County, his musical home from 2014-2017. Performing as the principal trumpet and concerto soloist during his senior year of high school inspired a determined love for music that he brought to the collegiate level. Since enrolling at Temple in 2017, he has performed and taught in many different ensembles, including the community bands Night Owls and Swingin' Owls, the Symphonic and Collegiate Bands, University Singers, Concert Choir, and most proudly, the Diamond Marching Band, where he served as Trumpet Section Leader in 2019 and Drum Major in 2020 and 2021. Zach hopes to continue making music and inspiring others with his passion in his pursuit of a Master's in Music Education degree in Fall 2022.



### INTERNSHIP PRESENTATION: PHILADELPHIA EAGLES

# JULIE MCLAUGHLIN, M.S. MUSIC TECHNOLOGY ADVISOR: DR. STEVEN KREINBERG

I was a full-time seasonal audio assistant with the Philadelphia Eagles for their 2021 season. I had the amazing opportunity to work with Eagles Entertainment in providing audio support and content with my manager Peter Kelly for the department throughout the season. I was very excited to get involved in various aspects of audio production from live mixing press conferences to producing music. My time with the Eagles has strengthened my confidence and skills as an audio engineer and working professional. Go Birds!



**JULIE MCLAUGHLIN** is an M.S. music technology student at Temple University. She completed her undergraduate degree at Drexel University's Music Industry program. She's done music production work for "Nightstalker: The Hunt for a Serial Killer" on Netflix and audio editing for TH1, Discovery Channel, and BBC as an intern at Hobo Audio. She was recently recognized as an Activision aspiring women in games scholar for 2021 and is passionate about audio for sports and video games.

### INTERNSHIP PRESENTATION: NFL FILMS

# LEX SIMAKAS, M.S. MUSIC TECHNOLOGY

ADVISOR: DR. STEVEN KREINBERG

I am a full-time seasonal audio engineering intern with NFL Films for the 2021 season. I have spent time in various parts of the audio department getting to understand their workflow, technology, and general approach to producing content. My work thus far has included audio digitization, cutting radio highlights, and post-production editing. It has been an enriching experience to work with such talented individuals at a company with a celebrated legacy of sports filmmaking. I feel that I have gained a much better understanding of what it takes to be a professional audio engineer.



LEX SIMAKAS is a multi-instrumentalist, composer, arranger, producer, and M.S. Music Technology student at Temple University. He received a B.M. in Piano Performance from Ithaca College with a concentration in Jazz Studies. Lex has worn many hats in his musical life, performing as a solo recitalist, collaborative pianist, dance accompanist/composer, jazz pianist/arranger, and pit orchestra musician. In recent years, he has been honing his skills in music composition, sound design, and audio engineering. He embraces a vast array of musical inspiration, and is always seeking out new worlds of sound.

# Boyer College of Music and Dance

The Boyer College of Music and Dance is part of the Center for the Performing and Cinematic Arts at Temple University. Students at Boyer College have the unique opportunity to interact with leading composers, conductors, educators, performers and choreographers while experiencing a challenging and diverse academic curriculum. The Boyer faculty is recognized globally as leaders in their respective fields. Boyer alumni are ambassadors of artistic leadership and perform with major orchestras, opera and dance companies, teach at schools and colleges and work as professional music therapists, choreographers and composers.

boyer.temple.edu

# The Center for the Performing and Cinematic Arts

The Center for the Performing and Cinematic Arts consists of the Boyer College of Music and Dance, School of Theater, Film and Media Arts, the George and Joy Abbott Center for Musical Theater and the Temple Performing Arts Center. Boyer is home to three-time Grammy nominated Temple University Symphony Orchestra, award-winning Jazz Program and research and scholarly advancements in music therapy, music theory, history, education, conducting, keyboard, voice and dance. The College also manages its own record label, BCM&D Records, which has released more than thirty recordings. The School of Theater, Film and Media Arts engages gifted students with nationally and internationally recognized faculty scholars and professionals. A hallmark of the School of Theater, Film and Media Arts is the Los Angeles Study Away program, housed at historic Raleigh Studios. The George and Joy Abbott Center for Musical Theater engages visiting performers, guest artists, set designers, playwrights and other Broadway professionals. The Temple Performing Arts Center (TPAC), a historic landmark on campus, is home to a state-of-the-art 1,200 seat auditorium and 200 seat chapel. More than 300 concerts, lectures and performances take place at TPAC each year.

arts.temple.edu

# **Temple University**

Since 1884 when founder Reverend Russell Conwell began teaching students, Temple University has evolved into a comprehensive urban research and academic institution. Temple has a world-class reputation and an international presence with campuses in Philadelphia, Ambler and Harrisburg in Pennsylvania, in Tokyo, Rome and educational centers in Seoul, Beijing, London, Paris and Mumbai. Temple's seventeen schools and colleges, nine campuses, hundreds of degree programs and 35,000 students combine to create one of the nation's most comprehensive and diverse learning environments.

