

MY LIFE IN SOUND

A Thesis

Submitted to the Faculty

in partial fulfillment of the requirements for the

degree of

bachelors of Arts

in

Music

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Hanover, New Hampshire

June 2025

Date _____

Approved: _____

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Acknowledgments:

First and foremost, I would like to thank my advisors, Professor **Michael Casey** and Professor **Sang-Wook Nam**, for their superior mentorship and guidance. Professor Casey has inspired me greatly with his technical facility and creative musicianship to challenge my facility, while Professor Nam's professionalism in both the compositional and production realms have forged new paths in my musical discovery. I would also like to thank the honors committee for allowing me to pursue this passion project. From the staff of Dartmouth's Music Department, I thank Professor **William Cheng** for his guidance in improvisation and creativity, Professor **Jason Ennis** for teaching me to play the guitar and discover jazz, Professor **Richard Beaudoin** for pushing my creativity in covering and musical borrowing, Professor **Rowland Mosely** for expanding my creative theory ability, Professor **Ashley Fure** for teaching me to experiment with live sound, and Professor **Kui Dong** for teaching me to see music visually beyond its traditional form.

Secondly, I thank my mother, father, and sister for their support in my musical endeavors. I became a musician from a young age because of them, and their guidance pushed me to develop into the best musician I could possibly be over the years. I also thank my girlfriend for supporting me and standing by my side as I've pursued this daunting project.

Thirdly, I would like to acknowledge my past teachers and mentors, without who, I would not possess the abilities to express myself on the instruments that I do today. First, I thank **Melinda Bateman** and **Marlene Hadju** for their patience and dedication in developing my technical and creative piano abilities throughout my childhood. Secondly, I thank **Stewart Rosen**, my first orchestra conductor who taught me how to read music, understand time, and both collaborate and lead in group settings. I also thank my symphony conductor, **Emily Reola** for instilling within me the art of symphonic music, and my cello teacher, **Hillary Smith** for teaching me to play and perform the cello.

Finally, I would like to thank the peers that have inspired and pushed me throughout my

musical journey. I thank **Justin Park** for learning DAWs and creating our first compositions together, as well as inspiring me to pursue the guitar. I also thank **Andrew Brozek** for pushing me to realize my full potential in multi-genre improvisation, and **Ethan Hoddess** for being by my side over the last eight years as we've pursued our high school and college musical careers in parallel. Additionally, I thank **George Cooper** for pushing me to refine my sound and gain the confidence to showcase my abilities.

I dedicate my Dartmouth Music Honors Senior Thesis-Album, *My Life in Sound* to all those aforementioned. This work serves as a reflective tapestry of their inspirations interwoven with my creativity, musical journey, and discovery.

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Introduction: Embarking on a Sonic Journey

Music has always been the cornerstone of my identity—a language that transcends boundaries and unifies disparate moments into a coherent, emotive tapestry. *My Life in Sound* is not merely a thesis; it is a multi-genre “album” that chronicles my evolution as a musician, composer, and producer before and during my time at Dartmouth College. This work captures the transformative power of music, revealing how classical precision, jazz improvisation, contemporary experimentation, and live soundscapes have converged to shape my artistic vision.¹

Throughout this project, I explore a wide array of musical styles. From the delicate, lyrical narratives of classical nocturnes and rhapsodies to the spontaneous interplay of jazz and blues covers, and further into original compositions that defy traditional structures, each track is a testament to years of technical rigor, creative exploration, and real-world experience. My journey is one of continuous growth—marked by countless hours of practice, experimentation with MIDI sequencing and looping, and the meticulous art of mixing and mastering using professional-grade production tools such as EQ, modulation, and gain control monitored via VU meters (see Huber and Runstein⁴ and Izhaki⁵).

The Framework of the Thesis-Album

This thesis is organized as an album comprising eight distinct tracks, each representing a different facet of my musical evolution:

- **Track I: My Classical Heroes** – A reflective tapestry of seminal pieces by Chopin and Liszt that challenged and refined my classical technique.

¹See Barker and Taylor² for discussions on authenticity in popular music; also, Biagioli, Jaszi, & Woodmansee³ provide context on creative production in cultural perspectives.

⁴Huber, Runstein, *Modern Recording Techniques*, 9th Edition

⁵Izhaki, *Mixing Audio*, 3rd Edition, Focal Press 2018

- **Track II: Slow Jazz for my Family** – An exploration of jazz improvisation and blues reinterpretation, blending traditional covers with individualistic interpretation and free styled voicing
- **Track III: My Mother’s Favorites - A Tribute to Winston, Yiruma, and Hisaishi** – A suite of reinterpretations of works by George Winston, Yiruma, and Joe Hisaishi, united in the key of D flat major to evoke the golden hues of dusk.
- **Track IV: Calling - an Original Piano Composition** - A fully original piano composition born from improvisation, technical rehearsal and experimentation, and influences from jazz, classical, contemporary piano. "Calling" is centered around a motif of four notes situated in the key of D Major, and goes through numerous developments to explore different modes within a single medium.
- **Track V: Velocity - an Original MIDI Jazz Composition** – A fully original and multi-instrumental jazz piece born from years of experimentation with sound engineering, mixing, improvisation, and sound design in Logic Pro.
- **Track VI: The Teenager’s Jam Session** – A short composition capturing the essence of "jamming" with fellow musicians and peers throughout my youth and college life, whether in my own room or in symphony rehearsal halls.
- **Track VII: A Classical Ode to John Mayer** – A fusion of cover, innovation, classical components, and original expression inspired by John Mayer’s *Free Falling* and *Slow Dancing in a Burning Room*, expanded with complex symphonic and blues guitar explorations.
- **Finale: College Life in Sound** – A grand, live soundscape that encapsulates the raw energy, emotional highs and lows, and real-world auditory experiences of my Dartmouth life—from swim meets to social gatherings and introspective moments.

Each track is not just a musical performance, but a narrative chapter—an intimate reflection of the technical skills, theoretical knowledge, and deeply personal experiences that have driven my evolution as a musician.

A Personal and Technical Manifesto

In creating this thesis, I have documented a diverse array of musical genres and styles while embracing creative reinvention. My early experiences—whether playing by ear without written music, experimenting with MIDI loops and analog warmth, or engaging in rigorous improvisation—culminated in a body of work that is as much about technical mastery as it is about emotional expression. Every composition is a living, breathing entity, imbued with spontaneous nuances and fresh interpretations.

The technical rigor behind this project is evident in every layer of production. Advanced mixing techniques such as frequency-specific EQ, tempo-synchronized echo and reverb, dynamic modulation, and precise gain automation are employed so that every sound finds its proper place in the sonic mosaic. I utilize effect buses and VU meters to create an immersive, cohesive listening experience that mirrors the complexities of life (see Dittmar⁶ and DJ Spooky⁷ for further insights into digital sampling and engineering).

An Invitation to Experience

The Sounds of Dartmouth Life is an invitation to journey with me through the many dimensions of musical creation. It is a chronicle of struggles and triumphs, a testament to the transformative power of art, and a celebration of the shared human experience. As you listen, you are not merely an observer—you become part of the narrative, drawn into a tapestry of sound that reflects the vibrancy, chaos, and beauty of life at Dartmouth.

⁶Dittmar, Audio Engineering 101

⁷DJ Spooky, Sound unbound: sampling digital music and culture, MIT Press 2008

In the chapters that follow, each track unfolds its own story, merging technical precision with heartfelt expression. This introduction sets the stage for a comprehensive exploration of musical artistry, a journey that transcends traditional academic boundaries and invites an intimate connection with the art of sound.

Chapter 1: My Classical Romance Heroes

This inaugural track serves as a reflective tapestry, interweaving seminal fragments from the classical repertoire that have profoundly shaped my pianistic journey. Each excerpt—carefully selected from pieces that defined my early musical challenges and subsequent growth—embodies pivotal moments of technical rigor, emotional depth, and artistic revelation. In choosing only the passages from the following pieces that resonated with me deeply, challenged my limits, and propelled my evolution as a classical pianist, I have crafted a narrative that is as much about personal transformation as it is about musical mastery.

I dedicate this track to my piano teacher, Melinda Bateman, that pushed me to learn how to read music after nearly a decade of playing by ear. It was under her mentorship that my technical abilities on the piano were pushed to their limits, enabling me to tackle pieces that I previously deemed unattainable for someone so new to sight-reading. Not only did she teach me to master the music written on the pages, but she also taught me how to interpret complexities in interpretation and expression, especially as we moved through my education of the Romantic Era. I present this inaugural track of classical masterpieces as an exhibition of the discipline, musicianship, and technical skill Melinda instilled within me, in addition to my promise at the time of our departure to complete Liszt's Hungarian Rhapsodies.

Frédéric Chopin's *Nocturne No. 20 in C-sharp Minor, Op. Posth.*

I commence this track with Chopin's *Nocturne in C-sharp Minor*. The piece opens with slow, delicately arpeggiated chords that work together seamlessly and simply, almost resembling a simple and seemingly monotonous technical drill. This introductory chord progression, repeated twice, are not merely a warm-up but a deliberate invocation of anticipation—each repetition laying the groundwork for the unfolding lyrical melody. Listeners, even those unversed in classical music, have often remarked on the initial simplicity that suddenly gives way to a stunning, *cantabile* line marked by delicate trills and cascading, downward and complex scale-esque runs from higher octaves in the C-sharp minor key and its relative parallels. This juxtaposition—between the ostensibly modest beginning and the breathtaking melody that emerges—has been central to my decision to use this piece as the initiation for the thesis. It encapsulates the element of surprise and the delicate balance between simplicity and profound emotional depth that defines Chopin's work. Moreover, I first discovered this Nocturne long before learning to read classical music at a time where I was still challenged by *Ode to Joy*. It was in the modern rendition of *The Karate Kid*, where Jaden Smith watches the love interest play the piece's melody on the violin in her final concert. Jaden Smith and I shared the same sense of awe, only, mine was routed in the artistry of the piece and the remarkable interpretation of romantic era classical music.

Transition into Franz Liszt's *Hungarian Rhapsody No.*

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After completing the C-sharp minor Nocturne theme's most famous components, including all of the runs that challenged and rewarded my career, I introduce a deliberate *ritardando*

to signal a seamless transition from the ending of the Nocturne into Franz Liszt's *Hungarian Rhapsody No. 2*. Although nominally in C-sharp Minor, the first two pages are, in fact, set in C-sharp Major—thereby effecting a modulation from the nocturne's introspection to a parallel major key. This transition is not only tonal but symbolic, marking the shift from reflective simplicity to a more extroverted display of virtuosity. The opening section of this infamous Liszt Rhapsody captured me with its two powerful hits on the middle C Sharp, succeeded by a deliberately long wait prior to the proud answer phrase.

Within this section, I incorporate a miniature cadenza of my own devising in an E-minor, harmonic-esque run that extends Liszt's original two-octave passage by adding extra octaves and nuanced artistic embellishments. This personalized cadenza represents a synthesis of technical prowess and interpretative individuality, serving both as a tribute to Liszt's virtuosic legacy and as an expression of my own evolving voice.

***Friska* Section: A Milestone of Technical and Expressive Achievement**

Immediately following the opening pages of Liszt's Rhapsody No. 2, I deliberately skip the next two sections in order to transition into the exhilarating *Friska* section. Preceded by a dramatic pause that heightens anticipation, the *Friska* marked a milestone in my piano career due to its extraordinary demands on timing, precise fingering, and dynamic hand interplay. In this segment, the right hand embarks on a rapid cascade of octave runs, interspersed with graceful, fleeting grace notes. The left hand, simultaneously, provides a continuous "filling" of C-sharp octaves. A middle note, subtly woven between the ends of these octaves, hints at the main thematic material at first glance. Watching arguably the greatest interpretator of all time for this piece, Valentina Lisitsa, I watched in awe for many years as she was able to present this theme embedded within such a complex pattern surrounding it. It was the most pure and impressive exhibition of phrasing I had ever seen, and it took me many years of determination to achieve even a fraction of her interpretation.

The section is characterized by a relentless accelerando, as the left hand alternates between delicate grace note trills—executed both below and above the right hand—and chal-

lenging jump chords that propel the music forward. One of the most demanding passages in the *Friska* involves groups of sixteenth notes played at a mind-blowing BPM of quarter note = 140 BPM (beats per minute): the pinky key strikes a high C-sharp, immediately followed by three staccato C-sharps an octave below. Mastering this required a painstaking, metronome-guided practice regime where gradual, 5 BPM, increments in speed daily eventually culminated in an almost imperceptible blur of motion. I recall the first time I attempted this passage; the technical demands seemed insurmountable until countless hours of disciplined practice finally yielded the fluidity and precision that I now take pride in.

As the *Friska* reaches its apex, a dramatic yet brief pause ensues—a moment of suspended time before I play the infamous rhapsody’s main theme. Similar to the preceding section, this main theme embeds its leading melody within complex patterns, only, in blocked rather than broken chord structures. The left hand’s jump chords use twice as many notes, increasing the power this section provides. The theme is repeated twice, and continues to accelerate as we move beyond it to its arguably even more challenging yet exhilarating variations. After playing two of the main theme’s subsequent variations, I seamlessly transition to the C Sharp major ending. The conclusion of the second rhapsody challenged me immensely, playing dual-handed octave 16th notes at 150 BPM that truly “fly” up and down the piano. This section is abruptly concluded with the striking resolution on the first inversion of an F-sharp major chord, a gesture that signals both an end and a transition.

Franz Liszt’s *Hungarian Rhapsody No. 6*

After the abrupt conclusion of the Rhapsody No. 2 passage, I shift focus to Liszt’s *Hungarian Rhapsody No. 6* in D-flat Major. Though these two rhapsodies are not adjacent in the grand scheme, I have always pictured the ending of the second rhapsody transitioning into a very specific section approximately halfway through the sixth. In this excerpt, I isolate the *Andante* section set in the relative minor key of B-flat Minor—a passage imbued with a

beautifully romantic and dramatic character. Here, the bass notes resonate powerfully yet calmly, constructing a dark, warm harmonic foundation over which the right hand presents a simple, yet deeply expressive melody. This excerpt, I would argue, is built more so around its silence than its physical notes.

This theme is introduced twice: initially in a subdued manner, then reiterated with octave doubling at a fortissimo volume, thereby intensifying its emotional impact. Notably, at the end of this octave passage, where Liszt traditionally embarks on an impressive virtuosic run, I consciously choose to deviate. Instead of the run, I resolve the theme with a carefully modified cadence, culminating in a single B-flat note. This deliberate alteration is not merely a technical decision—it serves as a transitional bridge to the final piece in this track, symbolizing a moment of reflection and continuity.

I find it vital to cover the personal importance of this powerful *Andante* passage in the sixth rhapsody. In the tenth grade, as a member of my high school's (Harvard-Westlake) state-winning symphony, we participated in a mid-year concert consisting of our group's finest soloists and quartets. Having auditioned with a rather mediocre interpretation of the first and third movements of Beethoven's *Moonlight Sonata*, I was not granted one of the piano solo positions. At this time, as a young and prideful musician, I was frankly surprised at my failure to secure a solo position, considering over a decade of training. It was not until the night of the concert that I achieved my first truly and deeply humbling moment, where a fellow classmate, nationally ranked pianist and flutist, William Liu, played an impeccable interpretation of this very rhapsody. It was at the *Andante* section that I was overwhelmed with feelings of envy, admiration, awe, anger and jealousy. It was at that point that I mumbled to myself, "I will play this, whatever it takes, and no matter how long it takes". So it is with great pride that I share this, now mastered, in the inaugural track of my college senior thesis six years later.

Frédéric Chopin's *Nocturne No. 2 in E-flat Major, Op.*

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The concluding chapter of this classical odyssey returns us to Chopin with his *Nocturne No. 2 in E-flat Major*. This choice is highly symbolic; it completes a cyclical journey through the romantic period of piano composition, beginning and ending with Chopin. The nocturnes, celebrated for their elegant simplicity and emotional lucidity, were my introduction to the world of classical piano. In contrast, the rhapsodies—especially those by Liszt—demanded an intense, almost chaotic technical and artistic commitment.

In performing Nocturne No. 2, I focus intently on the recurring main theme. This theme, repeated throughout the piece, is rendered with an emphasis on its simple, *cantabile* beauty. I intentionally accentuate the opening theme, which recurs with slight variations, and gradually build toward the nocturne's grand, renowned conclusion. The final passages feature ascending chromatic lines and a series of three identical, though octave-differentiated, finishing chords. Despite this conclusion's simplicity, I personally believe it to be the most sublime ending ever composed in classical piano literature. This return to a foundational work, after traversing the heights of virtuosic rhapsodies, symbolically represents the idea that true mastery is not linear but cyclical—an ever-deepening exploration that ultimately brings one back to the elemental beauty of one's beginnings.

Reflections on Musical Development and Personal Journey

My engagement with these pieces is inseparable from my broader musical development. My time in Dartmouth's Music 20 class—Creative Music Theory—was pivotal, introducing me to a variety of theoretical modes and chord progressions that enriched my interpretative

skills. The study of solfège, which I had never previously employed (having relied solely on letter names for notes), opened new vistas of technical and creative insight.

It is noteworthy that my first encounter with musical notation was not through piano, but rather the cello—a discipline in which I learned to read bass clef notation six years after I had been learning the piano purely by ear. This early foundation in the bass clef has uniquely informed my piano performance, fostering an intuitive prioritization of left-hand accompaniment over the right-hand melody. Moreover, my initial self-taught piano experiences, which were rooted in pitch interpretation and chordal improvisation rather than formal notation, have granted me an alternative perspective. I find that I perceive music on the audible spectrum through intervals, and visually through the patterns of the “piano roll” interface in MIDI software, where the length, spacing, and even the color of notes (representing their velocity) manifest as tangible, almost sculptural elements in my mind. This unconventional approach has become a keystone of my interpretative methodology, enabling me to see and shape music in ways that the physical score cannot fully capture.

Conclusion: A Journey of Endless Exploration

By revisiting these works, each with its unique technical demands and expressive possibilities, I am not merely retracing my past achievements; I am also laying the foundation for my future endeavors in composition and performance. As Pablo Picasso once said, “I spent my entire childhood trying to paint like an adult, and then I spent my entire adulthood trying to paint like a child.” In much the same way, my return to these classical roots, as well as my return from the complex rhapsodies back to the elegant nocturne, is not a regression but a deliberate re-engagement with the fundamentals that truly allow infinite artistic expression. I convey this through a simple expression of comparison: there is a vast difference between those who *can* play the piano and those who can *play* the piano.

In this track, every note, every pause, and every flourish is imbued with personal signifi-

cance. They chronicle not only the evolution of my technical abilities but also the emotional and intellectual growth that has defined my musical journey. Through these carefully curated excerpts, I invite the listener to share in a journey of continuous exploration—a journey where the interplay of simplicity and complexity, of discipline and creativity, forms the very essence of musical mastery.

Chapter 2: Slow Jazz for my Family

This track marks a transformative chapter in my musical journey, wherein I embraced the realms of jazz and blues—a world far removed from my classical beginnings. It is a narrative of exploration and reinvention, forged by the gift of discovering jazz interpretations and nurtured through rigorous instruction and relentless experimentation. Here, I delve into my evolution as an improviser and interpreter, recounting every pivotal decision, technical challenge, and moment of inspiration that has reshaped my artistic expression.

I present this track a dedication to my family. It was with the genesis of this new expressive voice that my mother, father, and sister were able to truly experience with me the raw emotion I always hoped to express behind my musicianship. In our Los Angeles house, they supported my development immensely, far before I achieved any level of proficiency. In return, I present this track of dramatic and romantic jazz interpretations of my newly evolved emotional voice as "Slow Jazz for my Family".

The Genesis of a New Voice

Upon arriving at Dartmouth, I received an exquisite electric guitar from my family as a graduation gift. Although by the end of high school I was already an accomplished pianist, cellist, and ukulele player - with extensive experience in composing, improvising, mixing, and producing via Logic Pro - the electric guitar opened an entirely new dimension of musical expression. In my sophomore year, I enrolled in independent strings instruction, specifically focusing on jazz guitar. Under the mentorship of Professor Jason P. Ennis in the three-term

course MUS 56.01-56.03, I was introduced to the intricate theory and soulful artistry of jazz and blues. Though we will not experience this guitar implementation until the latter half of this thesis-album, I found it vital to express that this part of my musical vocabulary would not exist without Professor Ennis' instruction. There is another dimension of understanding among jazz musicians regarding phrasing, interpretation, and musical freedom that truly took me by surprise and altered my musicianship entirely.

This intensive one-on-one instruction immersed me in the world of jazz and improvisation, teaching me not only the scales and chords that define the genre but also the art of *freestyling* on the fly while implementing bold decisions in the voice of melody. Professor Jason Ennis's tutelage expanded my musical vocabulary far beyond the rudimentary conventional chord progressions (tonic, subdominant, and dominant seventh) that had previously informed my piano improvisations. With newfound inspiration, I began to explore innovative ways to reinterpret classic 20th century tunes in order to express myself in a medium that felt both liberating and transformative.

Billy Joel's *New York State of Mind*: A Piano Prelude to Jazz Expression

The first piece of this track is an interpretation of Billy Joel's *New York State of Mind*. A lyrical and encapsulating piano introduction, I regard it as one of the greatest openings in modern jazz and blues history. Joel's introduction masterfully employs the chromatic component of the blues scale, embedding a vast array of artistic choices within its notes that hint at the melody, chords, rhythms, and emotional landscape of the entire song - without ever playing the full theme.

In my cover, I retain the core rhythmic elements and embellishments of Joel's introduction while interjecting my own measured pauses. Moreover, I brought up the key by two semitones (a whole step, or major second), from the original key of C major to a new one of

D major. My reasoning behind this decision is twofold: firstly allowing me to step up in pitch and thus energy from the C-sharp dominated inaugural track, and secondly introducing a deliberate warmth that I find the key of C to lack. The opening is defined by a series of staccato *fortissimo* repeated G major seventh chords, which are then elegantly countered by B-flat major seventh chords—a minor third higher—that create a striking yet satisfying juxtaposition. This interplay of major seventh chords, which I consider the “secret sauce” behind my own compositions, establishes a sonic palette that is both rich in dissonance and full of harmonic depth. The leading tone complements the tonic in each chord, crafting a sonic tension that is both unexpected and profoundly satisfying. Furthermore, the interplay between the leading tone and supertonic is a bold decision jazz musicians have made that I have implemented in my work for the sake of a richer texture and break away from anticipation.

Following these chords, the introduction unfolds into a series of broken, arpeggiated notes paired with robust left-hand octave climbing bass lines. This combination gradually leads to the first clear statement of the melody—a theme that is not rendered in isolated single notes but through complex intervals. These intervals extend beyond the simple major thirds and perfect fifths to include minor sixths and even augmented fourths, thereby incorporating the diminished chord sound that lends the introduction its unique, memorable character. Joel’s subtle use of the IV and V7 chords—delivered through fleeting motifs rather than a complete statement of the melody—prepares the listener for the full piece. Finally, a plagal cadence resolves the introduction with an emotional satisfaction that few musical passages can evoke.

Seamless Transitions: From *New York State of Mind* to *Misty*

Building on the rich harmonic foundation established by the introduction, I transition into a reinterpretation of *Misty* by Johnny Mathias, my Chinese grandmother’s favorite piece.

Both pieces share a common language of major seventh techniques and are rendered in the key of C major, which I brought to D major for this interpretation as well in order to facilitate a seamless modulation between them. This transposition, executed mentally over countless hours of practice, underscores my belief that music is a universal language where the synthesis of diverse ideas creates an enriched artistic expression. Moreover, I aim to prove here and throughout the album that there exist not one single musical idea that cannot be blended or transitioned into another. In the same way that words can be strung together in countless variations in spoken language, musical ideas offer the same limitless variation in an auditory language.

In my jazz cover of *Misty*, I take liberties with the original melody and structure by incorporating deliberate pauses and varied dynamics, principles that I absorbed during my early improvisation lessons with Professor Ennis and time alone with jazz musicians throughout college. During my jazz lessons, I was challenged to play two bars on, two bars off, a practice that instilled within me the importance of silence as a vital counterpoint to sound. As the piece progresses, I layer both blocked and arpeggiated chords, and weave in intricate chordal runs based on the major seventh chords that define the essence of *Misty*. One chord that particularly resonates with me is the inverted B-flat major seventh chord, which I employ as a harmonic foundation to support the evolving melody throughout.

The chord progression in *Misty* is intentionally nonlinear, defying the conventional I–IV–V and vi minor progressions typically found in popular music. This deviation from expectation as aforementioned is, in my view, the lifeblood of true creativity. It is this willingness to break away from formulaic patterns that has spurred countless innovative ideas in my own compositions. After fully exploring the thematic and harmonic potential of the opening phrases of *Misty*, I delve further into the song's later verses and choruses while oscillating between interpretation of Mathias' melodies and my own.

Composition Through Freestyle

The remainder of this track is a testament to the freedom that comes from improvisation. Much of my jazz improvisation evolved from practicing over looped chords—a method commonly embraced by blues musicians to develop spontaneous musical ideas. My first encounter with a loop pedal was revelatory; with the chords continuously looping, I discovered a plenitude of ideas and melodic motifs that emerged under minimal pressure to adhere to a pre-written score. I was able to achieve the ideas presented in this interpretation by looping Mathias’ chords as well, enabling me to experiment with different phrasing and embellishments to truly capture the romantic and dramatic essence of this piece.

Utilizing the looped *Misty* chord progression as a foundation for my eventual lyrical lines, I embarked on an authentic experimental freestyle session that lasted nearly 90 minutes. This process taught me the paramount importance of finding the right “voice”—a *dolce* tonal quality that perfectly complements the underlying harmony.

During the freestyle, I depart from the established melody of *Misty* and traverse through a spectrum of octaves and tonal landscapes. I experiment with various intervals, most notably the minor sixth between the third and the octave in the D major scale, which I use to tie disparate melodic fragments together. The improvisation is punctuated by accented chromatic grace notes that arise from the blues scale, occasional accelerandos and deliberate ritardandos, creating a dynamic ebb and flow that culminates in a plagal, fading cadence. This final resolution, delivered by the underlying piano chords, serves as a reflective coda to the entire track.

Synthesis and Artistic Impact

The evolution of my jazz and blues repertoire—from my initial covers to the spontaneous free styled expressions —has profoundly influenced my broader musical outlook. The tech-

niques and artistic choices I developed in this track have permeated my entire body of work, informing my approach to composition, arrangement, and performance. By merging the structured elegance of jazz harmony with the raw, improvisatory spirit of the blues, I have forged a unique musical identity that continues to evolve with every performance and practice session.

This track is not merely a showcase of technical proficiency; it is a chronicle of personal transformation. It represents my journey from a multi-instrumentalist with a classical foundation to an artist who embraces the fluid, ever-changing language of jazz and blues. Through rigorous study, experimentation, and creative risk-taking, I have expanded my musical vocabulary, transcending traditional boundaries to explore new realms of expression.

Every chord, pause, and improvisational flourish in this track is imbued with personal significance. They reflect not only the technical challenges I have overcome but also the deep emotional connections I have forged with music. It is in these moments of unbridled creativity—where tradition meets innovation—that I find the true essence of my artistic voice.

In summary, this track encapsulates my transformative journey into the world of jazz and blues. It is a testament to the power of musical exploration, the importance of embracing silence as much as sound, and the endless possibilities that arise when one dares to reinterpret established conventions. Through these layered expressions of covers, reinterpretations, and freestyle improvisation, I continue to push the boundaries of my creativity and redefine what it means to truly express oneself through music.

Chapter 3: My Mother's Favorites: A Tribute to Winston, Yiruma, and Hisaishi

Continuing on the concept of improvisation and covering, this track marks a decisive departure from blues and jazz toward the expressive realm of contemporary modern piano. In this chapter, I pay homage to the three heroes who ignited my passion for piano during my earliest years—long before I ever learned to read music. These influential figures, George Winston, Yiruma, and Joe Hisaishi, though stylistically diverse from one another, share a common ability to evoke emotion and paint vivid auditory landscapes with expressive simplicity. In this track, I interpret one piece from each of these artists and seamlessly string them together through deliberate key transposition and transitional decisions, all set in the key of D flat major, a key that steps down from the previous track in order to evoke a relaxed energy that I feel emulates the golden blanket draping nature's landscapes at dusk.

I dedicate this track to my mother, who forged within me the confidence to present my abilities with pride. Upon learning the works of Yiruma, and later Winston and Hisaishi at a young age, my mother quickly took a liking to these pieces. As I mastered them, she would request me to play them at the end of long days while she worked in the office that both her desk and my piano shared in our Los Angeles home. At social and family gatherings, she would encourage me to play for those around me, saying, "play the one I like!" and it was through those experiences that I gained the confidence to showcase my musical expression. Now retired, my mother continues to request these works at our home in Kailua, Hawai'i; this collection of work holds a special place in my heart, so I present this third track of my

thesis, "My Mother's Favorites".

A Personal Genesis: The Auditory Awakening

My journey into the world of contemporary piano began in elementary school, an era defined by pure, unmediated auditory passion. I began my lessons through an unorthodox Australian program called "Simply Music", under my instructor Marlene Hadju. Throughout my elementary and middle school years, I used nothing but my ear, internal rhythm, and chords to learn my personal navigation around the keys. Rather than painstakingly enduring the monotonous process of learning solfege, play endless repetitions of scales, I fell in love with the piano through its sound alone, unburdened by the constraints of notation. This love sustained me until I finally embraced reading music many years later. In retrospect, it is unsurprising that my piano ability is still primarily driven by my ear, chords, and intervals rather than by sight-reading. Without ever seeing a piece of sheet music, Marlene taught me to learn and performed multiple Bach inventions, Chopin preludes, blues and jazz pieces, and a plethora of chord-driven interpretations of Beatles songs. This early methodology, an intuitive rather than technical connection with sound, has continued to inform every subsequent artistic decision in my career. I would not possess the ability to render music in the way I do now had I been drowned in the academics of orthodox methodologies such as *Certificate of Merit* from a young age.

It is with this backdrop that I approach the works of Winston, Yiruma, and Hisaishi—a trio whose music, despite their differences, resonated with me in remarkably similar ways, each offering a distinct yet harmonious vision of modern piano expression.

Interpreting George Winston's *Rainsong*

I begin this track with my interpretation of *Rainsong* by George Winston. This piece embodies the idea that our most intense passions often emerge unexpectedly. I vividly recall

a transformative moment in the fifth grade when my twin sister and I were assigned to create iMovies for a history project on the preservation of the Amazon rain forests. While desperately searching for an appropriate musical backing track, we stumbled upon *Rainsong* on my mother's computer. In that moment of creative serendipity—amid the monotony and frustration of the project—a spark was ignited that would come to define my early piano career.

In my rendition, I focus on the first snippet of *Rainsong* in D flat major. Winston's composition is striking in its simplicity; the melody is repeated four times, with each iteration connected by a bridged transition of chords. Despite the repetition, every cycle of the melody is slightly different—whether through a long, reflective pause, an added or differently emphasized grace note, or the subtle incorporation of harmony only when needed. At the end of the segment, I interweave the tonic D flat chord with delicate iterations of the melody—played with the notes Mi, Re, and Do—while interjecting a B flat minor 7 chord between repetitions. This minimalist approach, where only two chords narrate an entire musical story through phrasing, taught me that “staying between sections” can be as musically vital as the sections themselves. It is this refined sense of timing and expression in *Rainsong* that solidified my lifelong affection for D flat major.

Following Winston's iconic introduction, he transitions into broken, simple chords akin to a slower and more simplified version of the lyrical section in Debussy's *Clair de Lune*

A Sole A-flat: The Transitional Bridge

Following the evocative strains of *Rainsong*, I introduce a solitary A flat note. This single tone, simple yet laden with symbolic meaning, functions as a deliberate transitional bridge into the next section of my suite. It is a moment of pause and reflection—a brief interlude that prepares the listener for the ensuing exploration of a different musical world, while maintaining the cohesiveness of the overall key.

Yiruma's *May Be*: A Dreamlike Journey

The next chapter of this suite is my interpretation of Yiruma's *May Be*. This piece holds a profoundly personal significance; it was the first time I managed to evoke genuine emotion in my mother—she was moved to tears purely by the beauty of the sound. In D flat major, the melody of *May Be* flutters with a delicate, almost ethereal quality. It is characterized by an abundance of grace notes that elegantly complement the thematic line, while subtle incorporation of minor thirds and sixths enrich the texture without overwhelming it.

Yiruma's strength lies in the consistency of his left-hand chordal structures. Typically, these are rendered as simple quarter notes outlining the tonic, the fifth, and either an octave or a tenth above the bass note. Throughout the piece, he maintains this same rhythmic structure but alters the fifth and octave notes into other carefully chosen voices that guide the piece's essence. Their simplicity creates an elegant framework, leaving ample space for the melody to soar. In my rendition, however, I expand upon this foundation by incorporating additional chords and a more complex left-hand arrangements, thereby achieving a fuller, more creative sound. I also accentuate the minor sections with louder dynamics, recognizing that the contrast between major brightness and minor introspection is crucial for emotional expression.

The chord progression in *May Be* became the very skeleton upon which I built my early musical theory—knowledge acquired long before I ever learned to read a musical score. In Asian culture, Yiruma's pieces, particularly those from the album *First Love*, are seen as narratives charting the phases of a first relationship: the hopeful beginning, the blissful honeymoon, and the inevitable end. In my interpretation, the melody of *May Be* begins in a high octave with a dreamlike quality, suggesting the purity of first love. It then repeats more passionately in a lower octave, with dynamics that underscore the intensity of these dreams. Gradually, I slow the pace and, using a series of carefully chosen chords and original melodic ideas, craft a transition that lifts the performance higher on the keyboard—setting

the stage for the final segment.

Joe Hisaishi's *One Summer's Day*: Cinematic Reverie

The concluding piece of this suite is my interpretation of *One Summer's Day* by Joe Hisaishi, a composer whose work is as visually evocative as it is aurally stirring. Hisaishi, much like his cinematic collaborator Hayao Miyazaki, possesses the rare ability to create music that is both emotionally resonant and visually compelling. For me, *One Summer's Day* is inextricably linked with memories of watching the iconic animated film, *Spirited Away*, on long family road trips, the movie's enchanting scenes unfolding on a small TV tucked into the headrests of the front seats..

I have transposed *One Summer's Day* into D flat major to ensure a seamless flow with the preceding pieces. Hisaishi's approach in this piece is characterized by the frequent use of major seventh chords, interwoven with sus2 and sus4 chords. These suspensions introduce adjacent major seconds that create a distinctive, fluid harmonic texture. In my interpretation, I start with his iconic spaced-out, rolled chords that evoke the rustle of trees and the gentle flow of water—elements reminiscent of a Japanese landscape. I feel that I drew inspiration to do this largely from my film scoring class, MUS 30.02, under Professor Kui Dong, who taught me the importance of prioritizing the imagery I intend to represent rather than the music I intend to play. A rather jarring, distant, and lone diminished minor chord follows these rolled chords, its sound both solitary and peaceful, serving as a poignant counterpoint before the pattern repeats with a variation in the bass, heightening the sense of anticipation. In one of the lone, ringing chords, I play a simultaneous semitone (minor second) between E and F, which, while risky, turned out to be one of my favorite decisions in the composition.

As the melody of *One Summer's Day* finally emerges, it encapsulates a longing beauty that immediately transports the listener into Hisaishi's cinematic world. I pay special atten-

tion to the phrasing and dynamic contouring of the melody—choosing specific articulations to express what I consider the most essential qualities of the piece. In an effort to personalize the performance, I incorporate left-hand patterns inspired by Yiruma’s approach, thus blending the structural clarity of Yiruma with Hisaishi’s visual and emotional flair.

A Holistic Musical Collage: Bridging Influences and Inspirations

The final act of this track is the synthesis of these three distinct yet interconnected interpretations. Bridging the works of Winston, Yiruma, and Hisaishi into a cohesive suite has been both a technical challenge and a profoundly personal experience. It is an exploration of musical borrowing—a concept I studied in depth during my MUS 3.02 class under Professor Richard Beaudoin—which taught me that true musical innovation does not lie in isolating oneself from influence but in embracing and reinterpreting the art of others. Music, by its very nature, is too subjective to be entirely original; it is the artistry and interpretation that breathe new life into familiar themes.

By interweaving the delicate phrasing of Winston’s *Rainsong*, the emotive left-hand foundations of Yiruma’s *May Be*, and the cinematic, visually inspired soundscapes of Hisaishi’s *One Summer’s Day*, I have created a suite that reflects both my personal heritage and my artistic evolution. The key of D flat major not only provides a harmonic unity but also serves as a symbolic canvas—capturing the golden hues of twilight and the transient beauty of nature.

In essence, this three-piece suite is a tribute to the early joys and pivotal influences that have shaped my musical identity. It is an invitation to the listener to experience the intimate interplay between memory, emotion, and technical mastery. Each nuance—the careful placement of a grace note, the intentional use of a pause, the dynamic interplay between major and minor tonalities—is a deliberate decision that embodies my lifelong

pursuit of musical expression. Without these artists to guide and inspire me, I may not have become the musician I am today. Their legacy lives on in every phrase I play, in every transition I craft, and in every moment of creative liberation that defines my contemporary piano journey.

Chapter 4: Calling: An Original Piano Composition

This track presents an entirely original piano piece, titled **Calling**, composed during my senior year through a process of experimentation and live improvisation. Unlike classical compositions written down note-for-note, this work was born directly from my hands playing—the music emerging as shapes and colors in my mind. In *Calling*, there is no premeditated system; I do not “write” the music in the traditional sense. Rather, I play it, and each performance is unique, never exactly repeated. This piece represents a culmination of countless hours spent mastering classical, jazz, contemporary, and technical piano, along with a deep immersion in theory and practical improvisation.

The Creative Process: Spontaneity and Visual Inspiration

When composing *Calling*, my mind is often a near-blank canvas. I visualize music as abstract shapes and colors—textures that I directly translate into sound. I begin with a simple melody, sometimes just a couple of notes, and instinctively play both hands together. There is no rigid structure or predetermined formula; the composition evolves organically as I respond to the interplay of notes and the emotions they evoke.

This piece emerged from a particularly exploratory practice session focused on the half step between D and C#. While practicing trills on semitones, just as I was concluding my session, I found myself repeating a sequence of three descending quarter notes—D, C#, and A—over and over. Looking out the window at Dartmouth’s campus at sunset, with leaves

gently falling and the warm autumn air embracing the scene, I was struck by a profound sense of warmth and inspiration. In that moment, the musical idea began to unfurl.

Building the Foundation: From Simple Melody to Complex Texture

At an *andante* tempo, I started with these three quarter notes as a foundation. To enrich the sound, I added a root D major triad in my left hand, played one octave below the melody. After experimenting with several iterations, I decided to lower my left hand an octave further, lending the piece a fuller, more *dolce* accompaniment to the emerging melody. I then alternated between the tonic and the subdominant major seventh chord—specifically a G major seventh—allowing the harmonic framework to evolve naturally alongside the improvisatory melody.

As the piece developed, my right hand quickly assumed a call-and-response structure. Every note of the call was met with a corresponding, dotted rhythmic response. The dialogue between the two hands became a conversation of musical ideas, each response perfectly answering its preceding call. This interplay of phrases and rhythms added an intricate layer of depth to the composition, demonstrating the inherent spontaneity of my creative process.

An Extended Freestyle Session: The Birth of a Masterpiece

The evolution of *Calling* was not confined to a single moment. Rather, it grew over a continuous 30-minute extended freestyle session. Every nuance—from the initial I–IV call and response introduction to later bridge sections—was captured in an extensive Logic Pro MIDI file. Upon reviewing the autogenerated score and the piano roll, I realized that this improvisation contained all the essential elements of the original piece I envisioned for my

thesis.

Building upon the call-and-response motif established at the outset, I expanded the harmonic language by introducing bridge sections built on supertonic and submediant minor and minor seventh chords. A simple plagal cadence was insufficient to carry the evolving narrative, so these additional harmonic layers provided the necessary complexity to sustain the piece over its full duration. The interplay between different chordal structures became a central theme—each variation adding fresh textures and unexpected twists to the melody.

Technical Innovations and Theoretical Developments

One of the aspects of *Calling* that I take the most pride in is the innovative use of harmonic textures and unconventional cadences. A central theoretical breakthrough in this piece is the employment of the median minor chord, F# minor, which I then complement with inversions of the C diminished chord. This combination allows the rich texture of augmented fourths to emerge, creating an unusual but compelling sonic color.

In building to the apex of each section, I deliberately avoided relying on simple triads and standard intervals such as perfect fifths and major thirds. Instead, I embraced the use of augmented and perfect fourths, major sevenths, and minor sixths. When approaching an authentic cadence, I preceded the return to the tonic with the second inversion of dominant seventh chords—a choice that not only heightened the tension but also provided a satisfying resolution. This meticulous attention to chordal detail, combined with the use of dotted rhythms and unorthodox pauses, ensures that every moment of the piece is both innovative and deeply expressive.

A Culmination of Influences: Drawing from a Lifetime of Inspiration

Calling is not just the product of a single evening's inspiration; it is a synthesis of the musical influences that have defined my career. The open left-hand chords of Yiruma, which morph subtly even when repeated, the dramatic thematic expressions of Liszt, and the stark simplicity of Winston's approach all play a crucial role in shaping the sound of this piece. I intentionally incorporate ample space and silence—an homage to the crisp autumn air—to allow each musical phrase to breathe. I take deliberate, unconventional pauses to underline the fact that this work is a freestyle creation, not bound by strict temporal constraints.

Moreover, the piece reflects the modern contemporary theory that I have developed over years of study. My ambition was to incorporate at least one chord rooted in every note of the D scale, and I exceeded this goal by exploring a spectrum that extends beyond the conventional major, minor, and major seventh chords. In doing so, I weave together dotted rhythms, variable phrasing, and unexpected chord progressions into a work that is as technically rigorous as it is emotionally resonant.

My improvisation classes in MUS 32 taught me that there is no such thing as a wrong note, a philosophy epitomized by one of my greatest influences, Jacob Collier. Collier's approach to theory—wherein he resolves any note or chord through creative, outside-the-box thinking—has inspired me to take similar risks in my own work. In his live performance of “Best Part” with Daniel Caesar, he uses only a fraction of the original chord progression yet imbues the performance with extraordinary texture and emotional depth. I strive to emulate that same daring and inventiveness in *Calling*, using familiar melodies played with different rhythmic variations to transcend conventional cadences and melodic patterns.

Synthesis: Articulating a Personal Vision

In *Calling*, I embed melodies within chords and explore intervals that defy standard expectations. The use of the parallel minor, the relative minor, the major seventh, and augmented intervals, combined with an ever-present emphasis on the leading tone, creates a rich tapestry of sound. This piece is a reflection of my journey as an artist—a culmination of my lifelong exposure to diverse musical influences, my rigorous study of theory, and my fearless embrace of improvisation.

Ultimately, *Calling* stands as a testament to my commitment to musical exploration and authenticity. It encapsulates the essence of my artistic evolution: an ever-changing work that is born from instinct, continuously refined through experimentation, and forever unique in its performance. This piece is not just an original composition—it is an expression of my inner world, a manifestation of the countless hours of practice, theoretical exploration, and emotional experiences that have defined my career. It is a celebration of spontaneity, a tribute to innovation, and a deeply personal statement of creative freedom.

Chapter 5: Velocity: an Original MIDI Jazz Composition

This track represents an entirely original composition—an evolution forged over more than half a decade of intensive MIDI instrumental experimentation and jazz, looping, improvising, and mixing. It is the culmination of late-night sessions, unrestrained creative exploration, and rigorous technical development. This piece stands as a testament to my musical journey, merging influences from my early collaborative experiments in high school with the advanced mixing and mastering techniques acquired in college.

A Full Song: Structural and Sonic Complexity

This track is the first full song in the thesis album that moves beyond a solo instrument—integrating complex rhythms, automated MIDI drums, original melodies, and evolving chord progressions that evoke a spectrum of emotions. Departing from the classical and contemporary piano vibes of earlier tracks, this piece fuses elements of jazz, blues, and pop into a cohesive instrumental work. At its foundation, the song is built upon a chordal structure dominated by major seventh chords between the tonic and subdominant, a hallmark of the early sessions with my friend.

In my freshman year of college life took me on a different path. Although my friend and I eventually went our separate ways, I carried forward our creative process—only now with an expanded palette of professional experience. Under the mentorship of a Grammy award-winning sound engineer and my secondary advisor on this thesis, Professor Sang Wook Nam,

I gained hands-on experience in professional studios and completed internships in sound engineering for Netflix shows as well as live and recorded albums for top 20 artists. Enriched by classes in jazz, blues, and electric guitar performance, I continued to write original songs while refining my production techniques. In particular, the course MUS 26: *Sound is Alive* (the sequel to MUS 25: *Sonic Arts I*) pushed me to explore the interface of Logic Pro without reliance on tutorials—teaching me through raw exploration. Working in Ableton Live for that class, I was forced to incorporate real-world sounds into my compositions, a “wake-up call” that revealed the vast landscape of technical and artistic work ahead.

Every instrument in this composition is meticulously gain-automated down to the millisecond, using a VU meter as my guide. Each track is EQ’d and balanced relative to the others, creating a cohesive mix where no element overpowers another. The precision of these technical decisions reflects years of self-taught mixing on Logic Pro and the professional practices I adopted during internships and studio sessions.

Synthesis of Influences and Final Vision

Overall, this original jazz track is the culmination of my songwriting journey—from the late-night creative sessions with my high school friend to the rigorous technical challenges of MUS 26: *Sound is Alive* and MUS 32: *Improvisation* and my continued explorations in sound engineering, mixing, and mastering under Professor Sang Wook Nam. It is a reflection of my diverse musical influences, primarily exhibiting jazz.

Technically, the track showcases my commitment to blending genres and pushing boundaries. I incorporate a full spectrum of chordal and rhythmic techniques: from the staple major seventh chords to inventive chord voicings and unexpected rhythmic deviations. The use of dotted rhythms, unorthodox pauses, and precise gain automation exemplifies my belief that every millisecond of sound contributes to the overall emotional impact of a piece.

In this composition, I have striven to articulate a vision where every instrument—be

it synthesized sounds, electric guitar accompaniments, or intricately programmed drums—works together in a harmonious conversation. The result is a multifaceted instrumental track that not only reflects my technical expertise and creative process but also encapsulates the essence of my musical evolution.

In conclusion, this piece is not just an original song; it is a narrative of my jazz, mixing, and mastering ability. It represents countless hours of experimentation, a deep understanding of theory and practice, and the enduring influence of those who came before me. It stands as a tribute to the formative experiences of my youth and the sophisticated, evolved artistry that defines my work today.

Chapter 6: The Teenager’s Jam Session: Uniting Styles

This track explores the vital power of familiarity in music—a force that unites listeners across generations. It is a representation of a jam session between instrumentalists from different genres. My goal in this piece is to create an immersive musical journey that invites every listener to participate, whether by nodding their head along or simply sharing in the emotional experience. In this track, I present diverse array of instruments presented, fun melodic solos, and blues chord structures departing from much of the *andante dolce* textures found in the former half of this thesis. This track aims to depart from rigid structure, igniting the same flame of creativity I felt amongst my musical peers, whethetr in the orchestra room or my dorm room. "The Teenager’s Jam Session" reaffirms a simple yet profound objective: to bring people together through the universal language of music.

Early Collaborative Beginnings

As a junior in high school, a close friend, Justin Park—a gifted electric guitarist with an innate ability to freestyle—became not only a dear friend but also a musical colleague. Together, after family dinners, we would retreat to my room and create music until sunrise. Our sessions followed a familiar structure: we began with selecting chord voicings, establishing a bass line, and then layering in drums—whether automated or played through a MIDI interface. We embellished our soundscape with synth textures, additional MIDI instruments, and culminated our creations with an electrifying guitar solo. Over a span of four months, these sessions produced four authentic original songs, each meticulously timed and

balanced with organically evolving melodies, basic reverb, gain automation, and a strong emphasis on major seventh chords between the tonic and subdominant. This early period laid the groundwork for my future experimentation and honed my instincts for real musical authenticity.

Transition to Solo Creation in College

Inspired by the Massachusetts-based group Couch, the Band—whose keyboardist, Danny Silverstein, is a constant source of motivation—I set out to create a track that mirrored the spontaneous yet meticulously crafted aesthetic of his chordal phrasings. Silverstein’s mastery in sliding between notes, employing vibrato similar to an electric guitar, and his technical prowess in synth sound design (even coding his own sounds when necessary) deeply resonated with me. As a double major in Computer Engineering, focusing on digital signal processing (DSP), and music, combined with my research in Machine Learning for mastering and mixing, I found his approach a natural bridge between my technical interests and musical creativity.

Drum Programming and Rhythmic Innovation

The genesis of the piece came from an attempt to recreate the unique drum patterns from Couch’s song “Fall into Place.” In my version, I eschewed vocals in favor of instrumental authenticity. The drum pattern is characterized by its unconventional structure: the third and fourth beats are never identical, with numerous skips and stutter beats that defy the listener’s expectations and create an organic, “human” feel. The drum sounds are marked by staccato piano notes and continually evolving yet consistent patterns—featuring kick drums, snares, and cymbals that have been carefully EQ’d to leave ample space while resonating deep within the listener’s chest. This rhythmic foundation is the heartbeat of the piece, setting a dynamic pace that propels the melodic and harmonic free style solo elements forward.

Melodic and Harmonic Developments

The track features alternating instrumental melodies throughout its progression. One of the standout sections evolves into a funk synth wah solo, directly inspired by Danny Silverstein’s freestyle during the 2023 live performance of “Let Me Hold You.” In addition to this, I integrate leading voices on the electric guitar—playing melodies that contrast sharply with the culminating synth solo. Other sonic elements, such as gongs, electric bass (both DJ-style and traditional), and a variety of effects, are introduced to fill in the soundscape, ensuring that every frequency has its own space.

Chapter 7: Symphonic Ode to John Mayer: A Fusion of Covers and Styles

This track is an ode to John Mayer—a multifaceted exploration that blends covering, reinterpreting, and original composition. Drawing inspiration from Mayer’s acclaimed techniques and his deep engagement with music theory, this piece is built upon the song “Slow Dancing in a Burning Room,” the very track that first compelled me to pick up a guitar. Mayer’s open discussion of music theory and his ability to craft memorable themes and motifs have been a constant source of inspiration for my own compositional journey.

Movement I: Free Falling

The track opens with a reverent piano-only introduction—a slow cover of the opening guitar phrase from “Free Falling” In this section, I employ a dark yet warm sonic palette to introduce the song’s vocal essence through piano. The initial phrases are rendered with a gentle, legato touch, capturing the inherent romance, expression, and nuanced phrasing that define Mayer’s style. Simultaneously, I introduce subtle symphonic elements: flutes, oboes, and clarinets for a recurrent counter-theme. Complementing these are bass notes and guitar voices, executed with unique patterns that infuse the piece with organic rhythmic complexity yet ample space.

After traversing the first verse and chorus—where I adhere closely to Mayer’s iconic melodic lines—I gradually depart from his precise structure. In this phase, I explore new harmonic territories, venturing into the realms of C# minor and E major. I incorporate minor seventh chords and experiment with multi-note voicings where the left and right

hands diverge yet harmoniously complement each other, thereby enriching the texture and emotional depth of the performance.

Movement II: Slow Dancing in a Burning Room

Having established the core of energy behind this fusion between classical symphonic energy and Mayer's blues influence in the first movement, I transition into writing my own melodies through the orchestral sounds, retrieved from Spitfire Audio's MIDI plug-ins. Both piano and guitar serve as vehicles for this creative expansion. I draw extensively from chromatic passages in blues and jazz scales, pausing deliberately to allow each phrase to breathe. My approach to the piano melody is marked by the use of intervallic variations—often incorporating minor sixths and mini-intervals—to construct harmonies that are both pleasing and richly textured.

Simultaneously, I layer wind instruments such as the flute, clarinet, and oboe to complement the acoustic instruments, while multiple guitar lines are interwoven to form intricate counter-melodies. These layered elements create a multi-dimensional soundscape, characterized by constantly shifting rhythmic sections designed to defy anticipated patterns. The arrangement is punctuated by frequent changes in tempo and the introduction of experimental voicing from various MIDI instruments. Throughout the piece, unique drum patterns and inverted chord structures further reinforce the originality of the work. As the composition progresses, I guide the ensemble through a decrescendo, gradually resolving into tonic chords in a steady 4:4 meter before fading into a spacious silence, enhanced by long reverb tails that give the impression of the music echoing into the distance.

A Transcendent Return: Electric Guitar Expression

Within three seconds of the final chord fading, my recorded electric guitar rendition of the song begins. In this segment, I pay homage to John Mayer's practice of revisiting his own

songs with renewed complexity and expression. The electric guitar reinterprets the original theme in a manner that is both more intricate and more emotionally charged. Through dynamic phrasing, expressive slides, and controlled vibrato, I test the limits of expressivity and musical theory—mirroring Mayer’s own approach to his work.

Theoretical Underpinnings and Mayer’s Influence

John Mayer’s compositional style is built on a robust foundation of music theory. Tracks such as “Edge of Desire” and “Neon”—born from simple guitar warm-ups—demonstrate his unique approach to harmony and melody. His theory, though rooted in classical principles, is tailored to create songs that resonate on an emotional level without getting lost in technical minutiae. This philosophy is evident in “Slow Dancing in a Burning Room,” where the use of major seventh chords in the subdominant, which I assert as essential in soft genres, creates an expansive, lush sound. The major seventh of the subdominant not only functions as the major third of the tonic but also aligns with the relative minor of the dominant, facilitating smooth harmonic transitions throughout the piece.

In my arrangement, I extend these theoretical concepts further by incorporating chromatic alterations, unconventional chord inversions, and a series of rhythmic variations that challenge conventional expectations. By doing so, I aim to capture the essence of Mayer’s influence while forging a distinct musical identity that is entirely my own.

Synthesis: A Celebration of Musical Evolution and Communal Expression

Ultimately, this track is a celebration of musical evolution—a synthesis of the early influences that inspired me to pick up a guitar, my time playing and competing in symphonies, and the sophisticated techniques in mixing I have striven to improve upon. It represents a journey

from the intimate, piano-driven covers of "Free Falling" and "Slow Dancing in a Burning Room" to expansive, multi-layered compositions for their choruses that seamlessly integrate classical orchestral elements, and innovative harmonic guitar progressions.

This piece stands as a testament to the power of listening, learning, and reinterpreting. It reflects the belief that one cannot create something revolutionary without first absorbing the works of those who came before. My exploration of every instrument I know—even incorporating acoustically recorded cello notes in a brief solo—adds a new timbral color, drawing from the instrument I first learned to read music on. In doing so, I allow the tenor and bass voicing to lead at times, offering a rare but striking contrast that enriches the overall sonic palette.

In conclusion, this track is not merely a cover or a two John Mayer songs—it is a multifaceted exploration of music that pays tribute to John Mayer's influence while simultaneously pushing the boundaries of conventional blues and pop songwriting. By blending elements of cover, reinterpretation, and innovation, I have created a work that encapsulates the emotional, technical, and theoretical dimensions of my musical journey. It is an invitation to experience the transformative power of music—a language that, in its ability to convey romance, expression, and communal unity, remains eternally compelling.

Chapter 8: My Life in Sound: The Finale

This final track serves as the sonic culmination of my Dartmouth journey, a dynamic soundscape that fuses my earliest memories with the sophisticated techniques of modern mixing, mastering, and real-world sampling. Here, I merge personal experiences—from the fervor of swim meets and the camaraderie of college social life to the bittersweet challenges of relationships and the ever-present anxieties of the future—with an immersive auditory collage. Utilizing advanced production tools such as modulation, precise EQ adjustments, tempo-synchronized echo, gain control via VU meters, and carefully routed buses for effects processing, I transform disparate sounds into a cohesive narrative that mirrors the multifaceted tapestry of my collegiate years.

A Moment of Silence and the Birth of a Soundscape

Immediately following the conclusion of the preceding cover and the cessation of the visual projection, a deliberate cutoff of silence occurs. This moment of quiet acts as a sonic palate cleanser—a reset that primes the audience for the oncoming live soundscape. In this interlude, I begin to layer pre-recorded and live-captured sounds that represent key moments from my Dartmouth career.

Real-World Audio Collage

The soundscape is meticulously assembled from an array of auditory snapshots:

- **Whistles of a Swimming Competition:** Pre-recorded audio captured with high-

quality condenser microphones, synchronized to video footage of swim meets. The crisp, staccato blasts of the whistles are processed with gentle compression and a touch of reverb to evoke the excitement of competition.

- **Crowd Cheering:** A dynamic recording of the crowd at a swim meet, layered to create an enveloping sense of communal exhilaration. These cheers are EQ'd to enhance mid-range frequencies, ensuring that they resonate deeply and vibrate with an almost palpable energy.
- **The Sound of Pool Water:** Captured via mics during the quieter hours of the Dartmouth Pool, this sound is treated with modulation and echo effects that provides a soothing and peaceful transition between sections.
- **Ping Pong Balls Bouncing:** I record the crisp sound of a ping-pong ball bouncing on a wooden table during the game Dartmouth Pong, a social icon of Dartmouth College. The resulting percussive sound is recorded through a dedicated mic and utilized throughout the soundscape, with its rhythmic cadence enhanced with delay and a slight phaser effect.
- **Ambient Party Chatter:** Pre-recorded from both fraternity basements and dormitory social gatherings, the layered murmurs of a crowd are filtered and processed with a bus reverb, creating an intimate yet expansive atmosphere that underscores the social dimension of college life.
- **Crunching of Sticks and Leaves:** Recordings of footsteps through BEMA, a park at Dartmouth, is paired with a complementary percussion—breaking sticks into a mic with a generous amount of natural reverb—while leaves add a crisp, organic layer. These elements are combined using careful gain staging and EQ to balance the different textures.
- **Dartmouth Bell Tower:** Recorded standing in front of the Baker-Berry Library at

2pm between classes. This is intended to capture the essence of a typical day going between classes

- **Peers' Singing, Laughter, Conversation, and Cheering:** These recordings are reverbed with a very high distance setting and extended decay to capture the effects of these beeing fleeting memories of the past. They are layered over one another in the introductory section to create an image of time passing by.
- **Dartmouth Acapella Group:** Recorded during my freshman year at a spontaneous acapella performance in the woods near my dormitory, group name is unknown. This small musical section signifies the transition between the night and day time between the second and third section.
- **Freshman Year Live Guitar Looping:** A junior year dormitory recording of me experimenting with looping pedal to experiment creating an individual full cover of John Mayer's Gravity. This is intended to illustrate the late evenings at sunset where I would relax from long weeks and expand my musical facility.
- **Boys Singing Adele:** This is a recording of my home swim team gathered together in the men's locker room, where we had a special moment all singing "Someone Like You" by Adele. I added multiple layers of reverb to capture how full this moment truly was, and used fade in and out settings in Logic Pro to smoothly transition in and out of this section.
- **Dormitory Microwave:** The Sound of my freshman year microwave being activated, encapsulating a typical college leftover meal being heated up for a quiet night in.
- **Friday After School Drink and Homework:** Used a podcast mic to capture the sound of opening a glass bottle of beer and pouring it into a cup. The subsequent sound of carbonation and pouring transitions from the first into the second section of where ambient guitar looping is faded in.

- **Daytime and Nighttime Weather:** Recorded the night time sound of cicadas prior to the acapella section to capture autumn nights at Dartmouth. For the daytime, I went to BEMA to capture the sounds of birds to simulate daytime, also including the crosswalk automated voice sound and walking down the classroom hallway.

Each of these sounds is meticulously timed and aligned using digital audio workstations, with echo and reverb parameters set to complement the overall tempo and maintain a consistent sonic coherence.

Overlaying Early Compositions and Evolving Themes

In addition to these environmental sounds, I overlay segments of some of my earliest original compositions created during my Dartmouth years. These snippets, previously recorded in Logic Pro, are woven into the soundscape to evoke the formative moments of my musical evolution. This layered approach is achieved by routing multiple audio channels through dedicated effect buses, where precise gain control (monitored via VU meters) and frequency-specific EQ ensure that each element occupies its unique spectral space without conflict.

Live Instrumentation and Improvisation

As the soundscape builds, I implement to improvised MIDI instrumentation that draw upon motifs from earlier tracks. The instruments include:

Electric Guitar Improvisation

- I perform spontaneous guitar solos, interlacing fluid melodies with intricate chordal structures. Using a combination of slide techniques, vibrato, and modulation effects (including chorus and delay), the guitar lines bring a layer of polyphony to the sound-

scape. Each line is carefully gain-controlled and processed through dynamic compressors to ensure clarity and punch.

Piano Themes and Chordal Explorations

- On the piano, I play cover melodies and powerful, loud chords that interweave with the final Adele section of the soundscape soundscape. The piano's output is routed through an analog-emulating interface that simulates warm tape saturation, while selected passages are treated with rhythmic echo effects synchronize to the recording's BPM.

Between instrument switches, I adjust effect knobs—tweaking frequencies, reverb decay, echo delays, and modulation parameters—to create dynamic transitions; depending on the results during editing, I capture this process via automation. This "live" manipulation, informed by years of experience in professional studios and real-time mixing, is central to the performance's evolving character.

In summary, this final track is a meticulously crafted performance that captures the essence of my life—its social bonds, athletic triumphs, personal struggles, and moments of joy—all filtered through the lens of advanced production, meticulous composition and live improvisation. Utilizing a diverse array of tools—from modulation and EQ to gain control, reverb, and real-time looping—this piece stands as a testament to my technical proficiency and artistic evolution. It is an immersive soundscape that not only narrates my experiences but also invites the audience to share in the communal, transformative power of music.

Chapter 9: Conclusion

In conclusion, *The Sounds of Dartmouth Life* is much more than a collection of musical pieces—it is a comprehensive narrative of my evolution as a musician and producer. Throughout this thesis-album, I have navigated diverse musical territories: from the refined intricacies of classical piano and the spontaneous energy of jazz improvisation to the experimental realms of contemporary composition and soundscapes with real-life samples. Each track represents a distinct chapter in my journey, a synthesis of technical mastery, theoretical insight, and raw, personal expression.

The process has been both deeply personal and technically rigorous. I have blended acoustic artistry with digital innovation, employing advanced tools such as modulation, precise EQ, tempo-synchronized echo, gain automation monitored via VU meters, and carefully routed effects buses. This integration of classical foundations, improvisatory freedom, and modern production techniques has enabled me to craft a sonic narrative that mirrors the multifaceted experiences of my Dartmouth life—from competitive swim meets and social gatherings to the intimate, transformative moments of creative exploration.

Ultimately, this work stands as a testament to the power of music to bridge gaps, evoke emotions, and unite people across generations. It invites the listener not only to experience a curated selection of genres and styles but also to share in a journey marked by passion, resilience, and continual artistic reinvention. As I reflect on the challenges, triumphs, and endless possibilities that have defined my time at Dartmouth, I am reminded that music, in its most authentic form, is a living, evolving conversation—a dialogue that continues to shape who I am as both an artist and an individual.

Bibliography

- [1] Barker and Taylor. 2007. *Faking it: The quest for authenticity in popular music*. New York: W. W. Norton.
- [2] Biagioli, Jaszi & Woodmansee. 2011. *Making and Unmaking Intellectual Property: Creative Production in Legal and Cultural Perspective*. University of Chicago Press.
- [3] Dittmar, Tim. *Audio Engineering 101*.
- [4] DJ Spooky. 2008. *Sound unbound: sampling digital music and culture*. MIT Press.
- [5] Everest, F. Alton, Pohlmann, Ken C. *Master Handbook of Acoustics, Sixth Edition*.
- [6] Franklin. 2021. *Sampling politics: music and the geocultural*. Oxford University Press.
- [7] Huber, D., Runstein, R. *Modern Recording Techniques, 9th Edition*.
- [8] Izhaki, R. *Mixing Audio, 3rd Edition*. Focal Press, 2018.
- [9] “Launchpad and Logic Pro Live Loops.” Novation. Accessed August 11, 2024. <https://us.novationmusic.com/launch/launchpad-and-logic-pro-live-loops>.
- [10] Magnus. 2022. *Philosophy of Cover Songs*. Open Book. [online resource]
- [11] Miller, Michael. *Idiot’s Guides: Mixing Music*.
- [12] Musescore. “Every Breath You Take - the Police.” Musescore.com, May 14, 2024. <https://musescore.com/user/27901018/scores/9832105>.
- [13] Plasketes. 2010. *Play it again: Cover songs in popular music*. Ashgate.

Songs Used

- Chopin, *Nocturne in C-sharp Minor*
- Chopin, *Nocturne No. 9 in E-flat Major*
- Liszt, *Hungarian Rhapsody No. 2*
- Liszt, *Hungarian Rhapsody No. 6*
- Billy Joel, *New York State of Mind*
- Johnny Mathias, *Misty*
- George Winston, *Rainsong*
- Yiruma, *May Be*
- Joe Hisaishi, *One Summer's Day*
- John Mayer, *Slow Dancing in a Burning Room*
- John Mayer, *Free Falling*
- John Mayer, *Gravity*
- Adele, *Someone Like You*
- Prince, *Purple Rain*
- Couch the Band, *Let me Hold You*