

Academic Statement of Purpose

Huazhou Wang (mAr\$hA//)

Ph.D. in Performing Arts Technology

U-M ID: 73768664

Music Producer | Stage Designer | Visual Artist | Hardware Designer

hw3261@nyu.edu | [Website](#)

"Imagination means nothing without doing."

- Sir Charles Spencer Chaplin

This powerful quote from Charles Chaplin captures the essence of my ambition and aspirations as I seek admission to the **Performing Arts Technology** Ph.D. program. At the **University of Michigan**, I aim to immerse myself in the confluence of music, art, and technology. I aim to create works that resonate globally, assisting individuals with visual disabilities in their pursuit of music performance and striving to make the world of music accessible to all. These works will embody visions of hope and beauty, much like the imagery of blue skies and blooming flowers, symbolizing new beginnings and joy. This pursuit perfectly encapsulates what I hope to achieve with my work and reflects the journey I have embarked upon.

My earliest memories are tinted with the magic of Chaplin's silent films, where humor and pathos blended seamlessly. Watching these films with my grandmother, her laughter and warmth added a special dimension to these experiences, teaching me the profound impact of artistic expression on human emotions. I was fortunate to grow up in an environment steeped in artistic richness. My family, a tapestry of artists, musicians, and designers, cultivated an atmosphere where art was not merely a pastime but a way of life. Notably, I clearly remember at the age of 11, my father gifted me an Xbox 360 with Guitar Hero, a pivotal moment that ignited my passion for and journey of becoming a musician and guitarist. This exposure to diverse forms of art during my formative years laid a solid foundation for my future pursuits. The creativity that surrounded me became a springboard for my exploration of music and visual arts, shaping my identity as an artist.

My educational journey at Berklee College of Music allowed me to immerse myself in the universal language of music. During my high school years, my fascination with the physics of sound led me to an experimental exploration of its essence. Intrigued by the characteristics of sound, I developed an interest in digital signal processing. Drawing from the principles of Fourier transforms, I realized that all sounds are based on sine waves. This led me to question whether a brief audio snippet could be expanded into an entire musical composition. Alongside my classmate Selina Zhang, we embarked on a project named "**Prototype**"^[1], an EP that sought to validate my understanding that all sound is fundamentally based on the sine wave. Using Selina's

voice samples, we created every element of the album, from synthesizers to percussion, and stream-of-consciousness loops, all rooted in sine wave theory. I also designed the album cover, reflecting our experimental approach in both audio and visual forms. This project was a pivotal experience, blending scientific inquiry with creative expression, and demonstrating the power of collaborative artistry in uncovering the deeper dimensions of sound. This synthesis of interests was not just theoretical; it became the driving force behind my initiative to rejuvenate Berklee's DJ club. While at Berklee, my role in revitalizing the DJ club went beyond just fostering a community; it became a platform for pioneering audio-visual performances. I introduced the concept of projector-based performances and experimented with it for over 3 shows, which significantly enhanced the experience of the shows. My vision for stage design, particularly evident during the **Berklee Caf Shows**^[2], involved using four projectors to cast synchronized video content to various surfaces, creating a multisensory experience that was perfectly in tune with the music. This approach not only captivated the audience but also left a lasting impact on the Berklee community. It inspired a newfound appreciation for visual performances, with VJing (Video Jockey) gaining prominence as an integral part of musical showcases.

This transformative experience at Berklee led me to collaborate with Zebbler, a renowned Audio Visual Artist, in his performance class. As a member of the first generation to partake in the "**Hypnothesis**"^[3] showcase, we conceptualized and designed a stage for the class's final exam showcase, held outside the Berklee campus at Sonia Nightclub. This event was not just a historic moment for Berklee, being the first ticketed nightclub performance to serve as a final exam, but also a personal milestone for me, showcasing my innovative contributions at the forefront of this new initiative. The success of "Hypnothesis" underscored the effectiveness of our stage design ideas and sparked a pivotal inspiration: what if I could develop a Max for Live plugin allowing musicians to perform as VJs while creating music in Ableton Live? This idea became the foundation of my Electronic Production and Design Major graduation project: "**DAISY**"^[4], aiming to merge music production with visual artistry in a singular, integrated platform. My thesis, a visual performance plugin developed for Max for Live and rooted in open-source communities, was the culmination of my efforts to bridge technology with music, connecting people through the universal language of music in a novel way.

My time at NYU's Master's program is marked by an ambitious fusion of electronic engineering, 3D modeling, and artistic vision, such as in my creation of a unique LED performance attire: "**DAISY-GL**"^[5], inclusive of custom-designed LED goggles and a suit. This project, which showcased my prowess in both technical and creative realms, featured a tailor-made microcontroller and specialized PCB routing. This setup enabled wireless communication between the attire's LED pixels and my laptop via WIFI, employing the Artnet

protocol, allowing for unencumbered movement on stage. I brought this technology into my "uNdEr FeAr"^[6]2023 summer tour.

My ongoing thesis at NYU, a nightclub environment management system: "DAISY-NC", was not just an ambitious technical endeavor but also a deeply personal one. This project was a stepping stone that kindled my interest in neuroscience, which seemed increasingly relevant as I reflected on the final decade of my grandmother's life. Her struggles with cataracts shifted my focus toward creating innovative solutions for the visually impaired. Motivated by this personal experience, I am now developing software that integrates with brainwave sensors to enable visually impaired individuals to engage with music in new ways. Inspired by the challenges encountered during the LED glasses project, this system algorithmically interpreted crowd dynamics to modulate ambiance and influence DJ song selections, sharpening my skills as both a DJ and a designer. This software allows them to select music through their thoughts, transforming them into DJs and experiencing the joy of music creation, thus bridging my passion for technology, music, and a desire to make meaningful contributions to accessibility in the arts.

Years after I decided to become a musician, I realized knowing technology is a very strong hard skill to implement new artistic ideas to music composition, production, and engineering. It fueled my passion to craft a unique performance set for electronic musicians and individuals with visual impairments, creating an inclusive space for them to engage and perform electronic music. It strengthened my commitment to innovative solutions, breaking down barriers, and making the world of electronic music accessible to all. This reinforced the idea of applying to **Performing Arts Technology** because Guitar Hero made me decide to become a musician in the future during that summer vacation when I was 11 years old, and because my dear grandmother sat and watched me happily as I got so involved in the game. This willpower keeps pushing me for so many years to make me have gone this far.

Thank you for your time considering my application.

[1] "**Prototype**" [Experimental Electronic DSP Production EP](#)

[2] "**Berklee Caf Shows**" [Cafshow Recording](#)

[3] "**Hypothesis**" [Hypothesis highlight](#)

[4] "**DAISY**" [A modular-based visual plugin for Ableton Live](#)

[5] "**DAISY-GL**" [A wearable LED project](#)

[6] "**uNdEr FeAr**" [Audio-Visual Performance 20 minutes example](#)