

Progress Portfolio: Self-Assessment

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Academic Objectives:

Over the course of my 3 years at Woodbury University, my core academic objective has shifted from working towards earning my Bachelor of Fine Arts degree as a Filmmaking major to graduating with a Bachelor of Science degree through the Applied Computer Science - Media Arts program. I originally planned on pursuing an education in film because I wanted to learn more about the technical side of filmmaking and gain experience working in post production and composing musical scores for student films. As I progressed through the program, I became less interested in mandatory “traditional” filmmaking classes and more interested in exploring and pushing the limits of the technology behind visual effects production, non-linear editing, and audio engineering, as well as technical processes involved in other cinematic and artistic mediums such as video games, music production, and augmented and virtual reality.

These interests spurred my dive into the world of programming and its application in media arts, and eventually led me to join the Applied Computer Science major and pursue Filmmaking as a minor. With the knowledge I have been gaining through my classes in this field of study, I strive to connect each of my academic projects to an artistic field I am interested in. One of these projects is a reactive artificial intelligence that I created for a data visualization project that composes music based on the popularity of online search terms over time. Another example is a 3D-modeled avatar that echoes an individual’s facial expressions and movements using skeletal tracking and can be used to animate people in real time. A third is an audio-reactive gallery installation I made for a media environments project that simulates the experience of a stage performer in front of an audience that will react to different emotions

portrayed by gallery attendees but will boo if the performance is deemed boring. I even created both an augmented reality mobile game that spawns digital ghosts within the user's local area that can "haunt" the user through horror-style jump scares as well as a virtual reality puzzle game built for the Valve headset in which the player must escape a locked maze before the rooms fill with water. I want to continue exploring these ideas in my future classes and push these projects even further while I zero in on a concept for my upcoming thesis project and work on applying to grad school.

Career Objectives:

I currently work as a facilitator and teacher at Treobytes, which is an organization that offers classes in STEM to students in southern California public schools, while simultaneously doing freelance work as a media composer and video editor in my free time (this has earned me credits in film and video game titles such as *A Champion's Tale*, *Blink Bot*, *Clap*, *Filtered*, *Space Epic*, and *Me, My Roommate, & Belle of the Underworld* to name a few). My position at Treobytes as well as my freelance work have allowed me to develop my ability to communicate with and work alongside other professionals on projects related to music production, video editing, game design, physical prototyping, 3D modeling, and animation while familiarizing myself with new technology relating to my field of study and projected career path. I plan to continue working at Treobytes while I am finishing undergrad, but in the future I would like to work in software development related to a media art form such as music production, filmmaking, or game design. I hope to one day work as a programmer at a software development company such as Izotope, which creates audio plugins for musicians, film and television editors, and other clients in the audio industry that uses artificial intelligence to aid in the audio engineering

process, or work at another innovative company that is changing the way software is used in creative industries and artistic endeavors.

Areas of Strength/Areas for Improvement:

The academic and professional projects I have worked on so far have helped me to develop my skills in web design and development, music production and composition, video production and compositing, application and software development, experience design and 3D modelling, and physical prototyping. As displayed by the projects showcased in my progress portfolio, my strengths lie in programming and working in non-linear editing systems.

In regard to web design and development, I am well accustomed to coding in HTML, CSS, and the P5 library of JavaScript. I have created two active websites from scratch and close to fifty projects using P5.js alone, including visualized sorting algorithms, a reactive AI, and cellular automata-based fractals to name a few. An area I would like to improve on is developing my skills in standard JavaScript, as I am least familiar with that language. For music production and composition, I work very efficiently and effectively in FL Studio and have developed web-based music production software using the P5 library of JavaScript, such as a program that can generate music procedurally. I still need to familiarize myself with the process of developing DAW-compatible plugins, and that is something I hope to work on over the next two semesters. I am very confident in my video production and compositing skills and can easily navigate and work in DaVinci Resolve and Touch Designer. I have worked professionally in DaVinci Resolve animating NFTs, creating a trailer for a video game, and designing a digital representation of an artists' installation piece for a museum. I have worked in After Effects and Premiere Pro as well, but would like some more practice before working in those programs professionally. In terms of

application and software development, I work well in Unity and have a solid understanding of C#. I have programmed and designed three completed games, including one virtual reality game and one augmented reality game. I also work well in Spark AR and programming languages such as C++, Python, and Processing.py, but am not as familiar with these as I would like to be. Some programs I have used for previous projects but would like to gain more confidence in are Illustrator, InDesign, Photoshop, Rhino, VRoid Studio, Arduino IDE, and MicroPython.