

DigiPen Application: Optional Essay

I've always said I've had a bad mix of bad genes: Cystic Fibrosis, Asthma, and Dyslexia. These impact each other, complicating one another, and making them all harder to overcome. However, I've never let that stop me, I always pushed forward, never using these conditions as excuses to slack off work, but rather as motivation to succeed further.

The worst, and most impactful of the conditions is Cystic Fibrosis (CF). CF changed my life in every way imaginable. From a young age I had to complete daily treatments, using heavy, noisy equipment. This made doing anything almost impossible, but one thing my parents found that I could do was use a computer. Picture 1 shows that this quickly became my favorite thing to do while doing my treatments, specifically playing video games.

Picture 1: Playing Video Games during Treatment

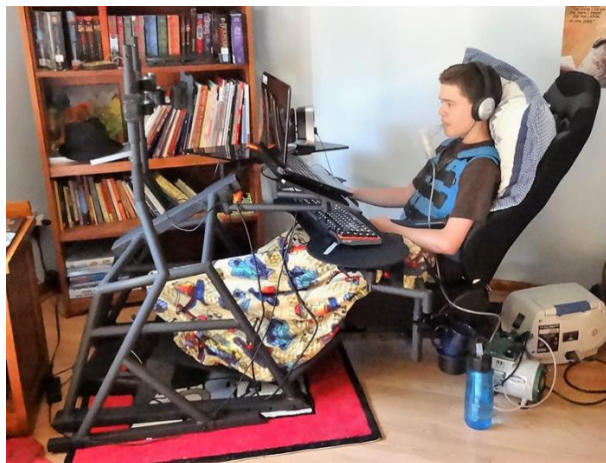


As a toddler I started playing an Atari emulator and the Window's entertainment package. Then I received the gift of wireless internet! On the internet I found New Grounds during the heyday of flash games and animations. Then as I grew older I started buying PC games on CD, until finally online stores like Steam took over the market. Spending so much time playing these games

throughout my life, I unconsciously started to develop an eye for design. I found things I like about the games and/or commented to myself on things that could be improved. However, it wasn't until 2013 when I built a gaming computer that I was truly set on my path of wanting to make video games as a career. While looking for guides on building a gaming computer I came across a podcast called TechTalk with JayzTwoCents. Jay's co-host was a senior software developer for Microsoft who worked on the Windows platform. He ran a series on his YouTube channel that taught entry level programming, using a very hands-on method. Although the series didn't run for long, it got me hooked into programming. I had messed around with some programming in video games, writing scripts for in-game computers and machines, but never anything more than a couple dozen lines.

Once I found this series I started trying to find anything else I could on introductory programming, from books, to videos, to websites. I bought old programming textbooks from used book stores and asked for them as birthday presents. I read and studied and fought with my programs. And I loved the struggle of getting my code to work. Picture 2 shows me programming during treatments. I started programming during my treatments instead of playing video games and that's when an idea came to me.

Picture 2: Programming during Treatment



I had always struggled with keeping track of time with my treatments, traditional timers often wouldn't work. I would turn the timer off but then get distracted before I finished the task the timer was set to remind me of. As I tried to find a better way to keep track of the time it took to complete my treatments, an idea for a timer application came to me. One that wasn't just a collection of timers such as Apple or Samsung timers, but a system of timers that was programmed as a collective treatment. Each timer would be able to effect and interact with the other timers as delays occurred. As each medication was completed the program would log the time the medication was finished and how long it took to complete. The timers would also demand more interaction than traditional timers, asking specific questions of the user; all of the logged data would then be used to help track the user's health.

This application dominated my programming interest for years, and it went through many revisions. As I tried to teach myself more and more about programming, I learned better ways to code the timers and log systems. This was what I focused on right up until I took my first game development course, at which point I promptly realized that I didn't really want to develop software. I wanted to develop video games, as it combined both of my passions, gaming and programming. I loved game design. My freshman year in high school I took both available game design classes back to back. It was the only thing I wanted to work on!

Throughout my first game design class I emulated several Atari games, the elegance and efficiency with which the games were designed and programmed was awe inspiring to me. Games I had played for hours on end as a kid, and play to this day, were yet so simple in nature. And as I was emulating these games I was writing down ideas for my own games, many inspired by the flash games of my early childhood.

Once I completed both game design classes at my high school, I turned to the advanced computer science classes offered. Over the course of the next two years I continued to learn about programming in and out of classes. I also taught myself to use Unity and Blender with the help of online tutorials. This allowed me to move on from Game Maker to Unity. The switch to

Unity (among other software) enabled me to create more complicated, 3D games, with custom models and animations.

I often worked on my projects while doing my treatment. I lost myself in the work, hours slipping by without me even noticing. I love working on the games, it was just as much of an escape for me as playing them. The frustration that came with debugging and designing these games, while potentially infuriating, is one of the most rewarding and inspiring feelings I have ever experienced.

As I continued to work on my own, I also took classes in school which continued to teach me programming theory. I attended classes through a level 200 college Data Structures and Algorithms course, accredited by Marquette University. In this course I learned much about managing group work to meet both self-set, and instructor-set deadlines. After this class I attended a learning seminar on Full Stack application development and deployment, which not only taught me much about server and database programming, but about managing group dynamics, workloads, and creative processes.

In 2017, I was granted a wish from the Make-A-Wish Foundation. I traveled to London, U.K. over Thanksgiving to meet game designer and critic Daniel Hardcastle, also known online as NerdCubed (aka Nerd³) While meeting with Daniel (See Picture 3) I also had the incredible opportunity to meet with and discuss game design with Alejandro Gallardo (See Picture 4), one of the game directors who worked on Life is Strange. Talking about Game Development and Design with both Daniel and Alejandro was an incredible experience and after the trip I was even more inspired to pursue game design as a career.

Picture 3: Discussing Game Design with Daniel Hardcastle (aka Nerd³)



Picture 4: Discussing Game Design with Alejandro Gallardo



Last spring, I shifted my focus from high level computer science and application development back to game design, and set my sights on college. During the end of my junior year I started working on my portfolio for DigiPen, as well as spending more time 3D modeling in Blender. I started writing more stories for my games, taking ideas in my head and fleshing them out somewhat on paper, keeping notes and ideas for the future.

Last summer when I first visited the DigiPen campus in Redmond I found the school to be exactly as I had imagined. I fell in love with Redmond and the life on campus was incredible. The students I met were exactly the type of people I want to work with - both motivated and brilliant. As I walked the halls of the school, the works of past and present students took my breath away with each step I took. I fell in love with the school, its' teachers and its' students. I knew that DigiPen would enable me to chase my dreams and also let me live those dreams while learning about my craft.

After visiting DigiPen this summer I turned much of my focus to completing my application portfolio and studying psychology. As I worked on my application I read books and articles on game design psychology, I listened to developer podcasts, read game reviews, and I started imagining a picture in my head of how to design the experiences and emotional interactions players love in video games.

I started deconstructing every piece of fiction I came across this summer, mostly movies and T.V. shows. I questioned the design of every element. From the most eye-catching props and CGI characters, to the most minor of background filler; each was chosen for a specific reason, and I tried to understand those reasons. I did the same with the psychology of the characters, trying to understand their motives, desires, and fears. I would try to predict how they would react to situations, or what they would do next based on what I understood of them.

Deconstructing other's work like this was nothing new to me, I had been doing it with video games for years already; I was looking at different elements in the movies I watched than those of the games I played. Instead of asking myself how something was programmed, or if a U.I. could be simplified, I asked about the director's rationale for choosing the set they did, or why a character responded in a specific manner.

I also explored why music was such an impactful thing to most people. It is an incredibly complex topic, one that I don't think has ever been holistically explained by a single theory. However, what I did realize is that music has the power to make people feel a certain way, and more often than not will do so. Just as actually seeing a sunset is far more beautiful than it would ever be if someone merely explained it to you, music doesn't just tell you how someone feels, it makes you feel that same way. That is why scoring movies, games, or theater, is so important, because one song at the right moment can be the difference between an audience getting goose bumps and praising your work as talented and unique, and them finding your work unoriginal, and uninteresting.

My Cystic Fibrosis has impacted my life in what almost anyone would consider a negative way, and without a doubt, it has affected my health in a negative way. However, when all is said and done, I think the CF has helped me way more than hurt me. It has motivated me to reach for heights that many thought I couldn't reach and has helped guide my interests and hobbies. It has also been the source of inspiration for two pieces: *A Rose in Chains* artwork below and an original prose-style poem that I've included in my portfolio (See PDF document: "*Valleys, Mountains, and Plains Poetry*"). Furthermore, CF introduced me to game design, the field I now wish to peruse.

Picture 5: *A Rose in Chains* Artwork



Creating *A Rose in Chains* was a very organic and natural process, I never had to stop and question any aspect of its design; I always knew exactly what I wanted it to look like. A purple rose is a symbol of Cystic Fibrosis, as is the saying *Breathe Easy*. The artwork originated in my sketch book with many pencil sketches as I tried to find proportions for the flower itself. Once I had found a general form for the flower, I moved to sketching it in Photoshop with a digital pen tablet. I prefer working digitally when I can, because it allows me to manipulate and layer my work in ways that are much harder to do on paper.

While working on my drawing of the rose, two song lyrics came into mind: (1) “*A little less victim a little more victory, happy hurts sometimes, blame it on the monsters in my mind*” - Icon for Hire; (2) “*And the only way to know how to live like it’s your last day, forget the past and find a way to let the monsters be your friends*” - Drawing North. Both of these lyrics and the artwork embody my fight and struggle with Cystic Fibrosis, and lead to my own saying:

*I fought and feared my monsters,
Only to wonder the desolation in my mind alone,
Now we grow with and around each other,
And dance into the night forevermore.*

A Rose in Chains artwork and its accompanying saying were created as an embodiment of my Cystic Fibrosis, and how I have learned to live with such a life altering condition. Creating this piece for me was very powerful!

As I have continued to explore game design, I have learned exactly how little I know, despite how much I’ve already learned. Even so, I don’t quiver before that knowledge, rather I thirst to understand more. Game design, or more universally, entertainment design and psychology, is one topic I never tire of learning about. I know that game design is what I want to study, and I know that DigiPen is the school that will drive me to excel.