

## **My Digital History**

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### ARCADE LIFE

My history with computers goes back a long way. My interest probably started where most computer kids interests started back then: the arcade. My friends and I would ride our bikes down to the arcade every time we had more than a quarter to our names for the chance to throw it away on 5 minutes of Donkey Kong or Asteroids. It was money well spent in our minds. The pixels were like glowing jewels calling out to us. It's hard to describe it to someone who doesn't "get" video games just what the rush feels like but it really is like magic. It's addictive.

Our arcade was in the belly of a pool hall, "Bert's", which was located at the bottom of a dingy staircase on the far right hand side of a strip mall. Looking back I can see that it sounds decidedly seedy but we didn't care. We would lock up our bikes outside, slip past the front desk on the left, ignore the pool table room on our right, and head into the small room in the back behind the glass door. The arcade!

I can still remember the smell of the pool hall and if I concentrate hard enough I can take myself back there. That's how

important the place was to me. My brain isn't going to let any of it fade away. It was where I needed to be whenever possible.

I was never a fan of pinball and there were far too many pinball machines in the room for my liking when we first started to go there. I guess pinball and pool go hand in hand. Over time these were pushed out to make room for better and better video games - Donkey Kong, Defender, Robotron, Dragon's Lair. Every few months a new machine would appear and offer up some new experience for a mere 25 cents. Or a whole dollar in the case of Dragon's Lair. It took some serious thinking before you would pay out for a round of that game. That would be 1 game for the price of 4! In truth, the graphics were so good that it was usually justifiable if you sat and watched the attract screen long enough.

#### INTELLIVISION

One particularly nice summer morning my best friend, Jeff, came to get me and hurried me over to his house. We crept onto the front porch and he pointed at the living room window. We peered through the partially see through drapes that covered the window and to their television screen. I couldn't quite see what was going on but what was clear was that I wasn't looking at a television program - it was a video game! Blackjack to be exact. His Dad had just gotten back from the store and they were now the proud owners of an Intellivision game console. I was floored.

Video games - at home?! My young mind reeled with the possibilities and I suddenly imagined myself holed up in my house, playing video games, and never spending another dime on an arcade machine.

The cloak and dagger routine we employed to actually see the video game in question was necessary because his Dad didn't want anyone to know they had a game console. Still to this day I've never determined why this was but maybe he was embarrassed. Secretly feeling shamed for having bought what many people would consider to be a child's toy? Many people still feel this way today about video games so it's not hard to think that the attitude was even more prevalent back then.

When he would go to work, Jeff and I would secretly play with the Intellivision. There wasn't much to do other than Blackjack and Poker (which came with the machine) but that didn't matter. What mattered is that we were sitting in the house playing video games. It was glorious.

Shortly afterwards, my Dad finally relented to my nagging and got an Intellivision for our house. Luckily for me, he fell in love with it and started to buy a lot of games for it. We soon had a huge collection and, while I didn't necessarily love them all, it was great to have so many choices. Did I want to play cards, shoot aliens, avoid monsters, or fly a B-52 bomber today (complete

with digitized voices!)? We seemed to have a game for every conceivable mood I might be in.

#### COMMODORE VIC 20

However, the arcade wasn't dead yet. The graphics on the Intellivision required some imagination to say the least. The huge blocky pixels provided hours upon hours of entertainment but they were nowhere near as nice as the arcade machines that I was still pumping my allowance into week after week.

The death of the arcade would begin with the first blow - the Commodore VIC 20. My friend, Chris, had a VIC 20 machine that he wanted to get rid of. He didn't like it and wanted an Intellivision instead. I had caught the computer bug at that point in time and thought that having a real computer at home would allow me to write my own games. This was a perfect situation! Even more perfect was that my Dad had purchased an Intellivision II at this point so we had the old Intellivision sitting on a shelf in the basement taking up space anyway. I asked my Dad if we could trade the old Intellivision for Chris's VIC 20 machine and he agreed! I was thrilled to say the least. I rushed over to Chris's place on my bike with the Intellivision balanced on the handle bars, and rode back home again with the VIC 20 riding the same way. Both machines arrived at their destinations safely and I got to work.

Making video games, it turns out, is hard. This is something you quickly come to realize when you start up your first computer and are staring at a "READY." prompt and a flashing cursor. Oh. OK. Now what?

Cracking open the User Manual was an eye opening experience. I taught myself BASIC and starting hacking. I didn't get very far in terms of completing an actual game but it was fun nonetheless. Being able to type a set of commands on the keyboard and have the computer do something in response was something that broke through a wall in my mind and told me what I'd be doing with the rest of my free time and, indeed, the rest of my life - programming and making video games. My Dad saw it almost immediately and my Mother gradually came to accept it. I don't think she really ever understood my fascination and would routinely admonish me to go outside and get some fresh air. Which was something I never understood because there aren't any computers outside. What was the point?

#### COMMODORE 64

However, the arcade lived on. It wouldn't die because although the VIC 20 was great fun and programming it was taking a lot of my free time, it still didn't have the graphical capabilities of those arcade machines. The pixels were smaller, no doubt, but still very large and chunky.

To be honest, this is where my memory gets a little hazy. I know that I somehow came into possession of a Commodore 64 but I honestly don't remember how. All that I can remember is that suddenly the VIC 20 was gone and was replaced by a newer and much better machine. 16 colors, 64K of RAM, and a new and improved processor. It was magnificent!

On the VIC 20 I had been saving all of my work on tapes and this continued on the Commodore 64. It worked well enough for what I was doing but more and more games were coming out as "disk only" and that meant it was time to start nagging my Dad again. We needed a floppy disk drive! After months of pestering, and me grinding down his resolve with magazine screen shots showing the incredible graphics that disk based games were offering, he again relented.

Having a disk drive opened up a whole new world of games. I remember very vividly seeing a preview of a new role playing game called Legacy of the Ancients in a magazine. The game leapt off the magazine pages and straight into my eager brain. I pre-ordered the game at the closest video game store to our house (a shop called "Rentronics"). A few weeks later they called the house to say that the game had come in and I rushed down after school on my bike to get it. As fate would have it, this was a Friday so you can guess where my weekend went.

This was one of my earliest introductions to role playing games and playing it rekindled my interest in programming. BASIC was available on the Commodore 64 but I found that doing things in it was fairly slow. I decided to take the plunge at that point and leave BASIC behind in favor of programming in assembler. This was a definite challenge for me but I bought a book by Jim Butterfield and consumed it cover to cover several times. Assembler was clearly the way to go if you wanted to make games that ran quickly.

Looking back I can see how that was a mistake. I should have stuck with BASIC until I had learned enough to actually make a game and bring it to completion. BASIC was fine for learning how to do that but I didn't understand that at the time. Jumping into assembler was great fun but it took me further from my goal rather than closer to it. Things that were easy in basic (like floating point math and printing numbers on the screen) were way more complicated in assembler. This made the prospect of writing games harder for me rather than easier so I turned to creating effects.

Truth be told, my interest in effects stemmed from software piracy. Back in those days I got most of my games for the Commodore 64 by getting copies from friends, mail trading with people, and downloading them (very slowly - we were on 1200 baud dial-up modems). These games would come adorned with an intro

screen where the pirate group that cracked and/or imported the game would show off their logo, run some scrolling text across the screen, play some music, and generally show off until you hit the space bar and loaded the game proper.

Sometimes these groups would create a series of these screens and release them as a collection that was referred to as a "demo". These intros and demos looked amazing to me, sometimes even better than the games themselves. So I set out to learn how to do them.

Initially I did things through character set tricks and other sleight of hand. I put out a few small demo screens which caught the eye of some guys in my local area who were far deeper into the Commodore scene than I was. They were amazed that I was able to do the things I was doing and asked me to teach them how to do rasters. "Rasters?", I asked. They assumed that the way I was doing my effects was through manipulation of the raster refresh on the machine which is how you are supposed to do them. Mine were, as I said, character set tricks and other short cuts. I didn't have the first clue how to do raster effects. But since we got along well together we hung out anyway and we all learned together.

Eventually we did figure out raster programming and created a demo group called "Evil". We put out several demos under this monicker that were well received and it was a really fun time.

I hadn't thought about or returned to the arcade in months.

## AMIGA

Somewhere around the middle of high school the world started changing. The Commodore 64 was no longer top dog and Commodore was pushing their new computer, Amiga. Another friend of mine, Steve, got an Amiga early on and I would go over to his place to check it out, play games, and see what the latest game looked like.

I eventually got one for myself but I again did the wrong thing with it. While Steve was teaching himself how to program in a language called "C" on the Amiga, I was frustrating myself by trying to get into assembler and wasting time playing all the games on it.

## PC

I was something of a shiftless lay about after high school. I had a crappy job at a retail store, was racking up credit card debt, was still living at home with my parents, and had very few prospects for changing that situation.

My Dad knew that I was into computers and he knew I had an interest in programming as a career, not stacking boxes in a store room. He pulled me aside one day and said he was sending me to school to learn programming and get a degree. He was going to pay off my credit card debt and buy me a cheap computer and he made one thing very clear: this was my one shot. Don't screw it up. I

didn't and I graduated with honors from my class.

After school I got a job programming and started buying PCs one after the other and was generally contented for years. I learned to program using various languages and taught myself an assortment of APIs like OpenGL and Direct3D. I was still interested in creating games, even after all these years, so my hobby projects at home tended to be game related.

#### LEVEL DESIGN

What I find amusing is that my actual induction into the games industry didn't come via programming as I always thought that it would. It came through level design. I was programming business software during the day and I was playing around at home with various games. One of those games was "Doom 2" and I saw a book at the store that talked about how you could edit the game and even create your own levels for it. "Really?", I thought, "That sounds like fun!" So I bought it and started hacking around with Doom 2. I was instantly hooked.

I even remember the first thing I did as a level designer. I started up the editor provided with the book and added a hanging corpse to the first room in Doom 2. I started the game up and didn't see it. I was crestfallen. I walked around a little and eventually got myself into a position where I could see it. There it was! Something that I added was IN THE GAME! I walked around

and kept looking at it to make sure I wasn't imagining it. I wasn't.

From there I went on to find better editors for Doom 2 and made some levels for it. After that, Quake came out and then Quake 2 and then Unreal and so on. There were always better games, better editors, and more level design to be done. With each game came new possibilities. More polygons allowed on the screen at one time, actual 3D environments, colored lighting, and so on. More toys for my level designer tool box.

I eventually got a job doing level design for Legend Entertainment on the Wheel of Time game. That was my gateway into the industry. I also took up the programming torch again. At the time Tim Sweeney, owner of Epic Games, was working on a new C++ based version of the Unreal level editor, UnrealEd. However, he announced that he was stopping work on it to pursue other things that needed doing. I emailed him and asked if I could carry on developing it in his absence. He agreed and I started finishing it up and adding features that I wanted it to have.

As a result of this, Epic Games saw my work and offered me a job that I eagerly accepted. That's where I still am today and I couldn't be happier! Working on titles like the Unreal Tournament series and Gears of War has been the greatest time of my computer nerd life.

## MAC

A few years back I grew tired of PCs and the constant need to upgrade them to keep up with the times. I didn't want to deal with driver issues anymore. I didn't want to hunt down patches so I could play the latest game that I just bought. I didn't want to have to get into the guts of my computer because things would suddenly stop working for no apparent reason.

Then I had a revelation - why was I using a PC at home anyway? Was there a reason I couldn't get a Mac instead and try that? I thought about it and came to realize that, no, there wasn't any reason. Most of my gaming had migrated to consoles already and my PC was mainly used for hobbyist programming projects. I could just as easily use a Mac for that and it would give me a chance to learn a new computer platform and operating system. I'm always up for learning!

I bought a MacBook Pro and haven't looked back. It's been an absolute blast and I would recommend a Mac to anyone who doesn't do a lot of gaming on their home computer. The games market on the Mac isn't great (but it's not devoid of games either - there are plenty there to keep you busy) but for everything else, there's no contest in my mind. I love it and I think I've found a new home.

I can't use a Mac at work since we develop on PCs, and

probably always will, but my home life has completely converted over to Mac.

And the arcade finally rests in peace.