

# A Digital Immigrant's Tale

By Sean McCormick

## *Analog Origin Story*

All 10 lbs of me arrived in 1967 in an analog, yet enhanced (c-section) fashion. This was the year the occupants of Apollo I burned to death during a routine launch pad test, Star Trek was in production, and the floppy disk was invented. The Internet aka ARPANET, consisted of a whopping two computers at MIT. My father, just 23, had just been tasked with developing a fine arts department at a nascent junior college in Ft. Worth, Texas. My mother put her teaching career on hiatus to raise my younger brother and me.

*Hey, it was the 70s, Man...*

Our household had little in the way of personal technology, aside from a rather monstrous piece of furniture, dubbed an "entertainment center" back then. It was around 30" wide and over 60" long. It included a vinyl turntable in a recessed well on the left side and a radio tuner on the right side. In the middle was an opening that housed a large, replaceable, and probably radioactive color picture tube. You would just have a technician come replace the CPT when it eventually wore out after a few thousand Gilligan's Island reruns. That, and a small Fisher Price record player that my brother and I (mostly) shared was pretty much the extent of our gadget collection. I do recall my father bringing home a good-sized reel to reel magnetic tape recorder from the college to record some piano passages and we had quite a bit of fun with it. My mother asked us mock interview questions and the delight of hearing our voices being played back was intense. A Super 8mm movie camera appeared at our house within a couple of years, but the shooting/developing process and expense kept that device mostly on a closet shelf.

## *Getting in the Game*

Along came 1975... My mother used to take me to animation festivals, long before PIXAR would share *The Adventures of André and Wally B.* with us. *Bambi Vs. Godzilla* was one of my favorites. While attending the latest festival at the T.C.U. Theater, there was a vertical piece of furniture in the lobby near the pinball machine. It had a small black and white television on the center. It was something called PONG. I managed to bleed a quarter from my mom and was instantly hooked. Imagine my disbelief a year later when the first Atari television commercial appeared, claiming you could play PONG at home?!? We managed to afford one by 1977, but *THE CURVE* decided to mock us just months after obtaining it. The Atari 2600 Video Computer System Console appeared in September of '77 and became insanely popular. It would be over two years before my dad would pull the trigger on it, so I had to live vicariously through my more early adopting friends. I probably still have defects in my wrists from those years. Atari's success started a virtual conga line of imitators, one kid down the street had an Intellivision, while another had a ColecoVision. Made it hard to combine resources and share games. As this was long before TV's had HDMI, you had to screw in a little box that would interrupt your TV's antenna (that's right, pre-cable TV) connection. It had a slider switch that would change the TV screen to the game's output. You would also have to put the TV on CH3/4, as it was off-limits to broadcasters. On the portable front, all we had was a little 9V handheld we'd use in the car a lot. The Mattel Classic Football Game. It's rich graphics consisted of a handful of little red dots that represented football players. I had more fun with that rinky-dink device than I ever did with any of the modern Madden games.

## *Phone Home*

Middle school had begun and it was time for a communications upgrade. My parents had pretty much had it with their phone

being tied up by their obnoxious kids. This was pre-call waiting, pre-voicemail, so no one could get through from the outside while we were home. That Christmas, we were delighted to see that both of us had received our own Trimline phones which also meant we now shared our OWN NUMBER! It would still be a few years before an answering machine arrived, but when it did, it was another tidal moment, as you could dial a code from a payphone and it would playback whatever was new.

### *C30, C60, C90*

Another game-changer in our domicile, actually in my orange bedroom, was the birthday arrival of a convergent playback/recording device. A Soundesign turntable/cassette/tuner combo. High-noise, low-output, all awesome. These devices spawned the coveted era of the "mix tape", glorified in the film Boogie Nights, and more recently in Guardians of the Galaxy. You could record onto hissy low-cost cassette tapes from either the turntable or the radio. This thing took a lot of abuse from me over the next few years, especially when I was a senior in high school and we had started a rap group called the "Crash Crew".

### *1s and 0s*

Back to the games... Another type of console appeared around 1981. What made this one different was that this beauty had a keyboard integrated into the body and you could create your own computer programs using the BASIC language. It was touted as a "friendly" computer, called the Commodore VIC-20. Somehow, in 1982, my brother had wheedled my now-beleaguered father into obtaining it. No small feat, as those babies were retailing for around \$299.00 back then. Sadly, I had zero interest in the computer programming aspects and just played Lunar Lander or floundered through one of Scott Adams fakakta text-based adventure games. Very few of my friends had any interest in programming then. I had one friend who had the little Timex Sinclair computer, along with the Atari 5200. Our

rickety high school had a nascent computer “lab”, basically a drab room with a few Tandy TRS-80s (Trash 80s, they were called) that were used for the “Computer Math” class that most of us avoided, unfortunately.

### *All this Machinery, Making Modern Music*

I signed up for middle school band as a drummer in 6th grade, circa 1979. Around 1983, my drums, a mish-mash of different-shelled Ludwig mutts, got a tech makeover. I was in a teenage cover band, the bass player was the oldest and therefore could drive us around to pawn shops to browse used music gear. Amazingly, we came across two identical used electronic drums in a Ft. Worth pawn shop. The Synare-3. It looked like a UFO. It was a back, circular object with knobs all along the front and a foam pad on top. It had two oscillators and a white noise generator. They were guilty of providing a good deal of strange sounds on a lot of the recordings at the tail end of the disco era. I scored them both for \$300 total, which was incredible, and it upped my street cred. I was very amenable to the advance of electric drums, drum machines and synthesizers back then. I saw them as tools and not a compromise. Many old-school drummers weren't so open minded. I was thrilled when I got to be in a band that used an Apple II on stage to control rackmount synths and effects in 1986. My old band had tried this in 1985, but it was uber-buggy. Tyler, the keyboardist in the new band, was a freaking shaman. We were now able to play many of the modern new wave songs at gigs, thanks to that computer, MIDI technology, and Tyler's tech prowess. My now all-electric drums were those Simmons plastic hexagons that you don't see much anymore. Our metronome system (so that I would be in sync with the computer) was pretty low-tech, however. It consisted of a violin pickup, shoved under the computer chassis, which ran into a Yamaha guitar amplifier by my drums. Music recording technology was still dominated by analog tape, although some trailblazers like Peter Gabriel were releasing fully digital

recordings then, you just couldn't afford them yet. In 1988 the band I was living with got a hold of what was called a sampling keyboard, or sampler. Basically a computer with a several-octave keyboard attached. It used floppy disks to store and retrieve sounds. You could put any sound that you could record into its very limited memory, then play it back via the keyboard. Each half step you pressed either raised or lowered the pitch of that sound, regardless of whether it was a tuba or the local gas company rep who dropped in to remind us to pay our bill (it was eventually cut off). All of a sudden, musicians all over were overdoing it, abusing James Brown, Van Halen, or any artist that had a memorable riff that you wanted to throw into one of your songs. Copyright law eventually caught up, but we had a blast for a few years. Eventually we began recording entire albums affordably into computers and magnetic tape mostly evaporated, except for a few holdouts who still liked to track their performances onto tape for the analog "warmth" or saturation, then digitize it all for editing and mixing.

### *Welcome to the Matrix*

We have now reached the day when I officially left my homeland and set sail for the New World. Of all my birthdays, turning 27 in 1994 was probably the most impactful. Earlier that year I had been coveting my brother's PC, I think it was a 386. Seeing it run the game Myst was downright exciting. When my birthday rolled around, my dad made the best investment in me to date. Far more effective than any of my half-assed college fumbblings. He helped me obtain a 486 DX2/66 PC. 8MB of RAM and a Maxtor 540 MB hard disk. I managed to cobble together enough change to obtain a US Robotics 14.4 modem. My leanings toward the PC world vs Mac were solely financial. I was driving the short bus for the Austin Independent School District and playing in bands at the time so I wasn't exactly rolling in dough. I had enough friends on the PC side to access pretty much any software that came up. I even managed to obtain web

access for free, as a fellow musician friend who attended UT didn't have a computer, so I gave him a six pack of Negro Modelo and he gave me his access ID. UT would give its students a floppy disk that had a TCP/IP dialer program, Gopher (an early, file-retrieval browser), Eudora (an email program), and Mosaic (a pre-Netscape web browser). As a newly minted digital immigrant, I started working to pass my citizenship test. I became obsessed with learning all the traditions and cultures of my newly adopted homeland, striving to lose my accent as soon as possible. My crappy efficiency apartment suddenly became a palatial stately home. I now had access to top universities, my own recording studio, a post production suite, awesome arcade, virtual singles bar, and the equivalent of a text-based global ham radio! After a few years of flailing around, my compass had hit true north with an audible "thunk".

### *Bootstrap U*

The next few months were a blur of DMA's, IRQ's, IRC channels, DOS commands, floppy disks, CDROMS, peripherals, and a small army of faceless new friends. I found myself well-suited for the nonlinear nature of this new environment. I schooled myself and leaned on a few key friends to help with some of the heavier lifting. I can't count how many new tricks a day I picked up back then. My family was inundated with talk about my new obsession and politely indulged me, but would come to rely on me heavily a few years later. By then (1995) I was toiling overnights at a local printing/copying company who had just added desktop publishing services via PowerPC Macs. I began learning early Photoshop (pre-layers!) in the wee hours of the morning, as I was the only employee on the graveyard shift. I would lug my desktop up to work so I could play online IRC games using the MIRC app whilst running large printing jobs. At that point, I was online pretty much every day for some duration. Shortly after, I stumbled on my first online personal ad. It was some UT bulletin board. While print

personal ads were nothing new, this seemed different. I reached out, and began a two week correspondence. The three-note marimba notification the email program Eudora used to indicate mail had arrived was one of the happiest sounds. I finally got her number and asked her on a blind date to a wedding.

## Dellcatraz

My new obsession was starting to get expensive. I had Frankensteined a new box together with a P90 processor. 8MB of RAM wasn't cutting it anymore, so a friend arranged a shady meetup with another friend. We hooked up at an old Austin metal bar/pool hall called the Back Room on E. Riverside Dr. I bought 16MB of RAM for \$400 (amazingly, that was a good deal then) from some guy wearing a leather jacket. After that, I decided it was time for my hobby to start earning its keep. Dell was hiring pretty aggressively in 1996, they had some really lame radio ads in rotation, geared towards geeks who might be worried they'd have to cut their hair to do tech support there. I began pestering their recruiters, who initially didn't respond at all. My tenacity eventually paid off as I wore them down. I finally was granted a face to face with one of their hiring managers. He was a pleasant, middle-aged fella, who quickly ascertained that I had zero professional experience. He did, however, have enough snap to sense my enthusiasm was authentic and he determined I was personable enough to trust on their phones. A few days later I received a job offer in the mail! I was slated to be in one of their new groups designed to exclusively support Dell's new line of notebooks, with a heady starting salary of \$10.40/hr. I was thrilled. Back then, Dell still did their customer service internally, so we were placed in a six week paid training course to prep us to field technical phone support issues. While it seemed many of my classmates considered this to be pretty remedial busy work, I, on the other hand, was incredibly grateful for it. I had only the knowledge I had

gathered on my own up to that point. We learned about processors, memory, storage, modems, tape drives, CDROMS, printers, networking, etc. We also had to learn their antiquated POS/Support software for logging call issues, ordering part replacements, and issuing field service appointments. We were manacled to these Aspect phones running call center software, which logged every moment of your work day. Your metrics would be displayed at the end of every week to foment some unofficial competition. We were expected to resolve around 40 issues per day. Every day. I didn't even have an actual laptop in my cube until about six months in, all our troubleshooting was done via memory or frantically flipping through online documentation. Fear was a great motivator for me back then. The average shelf life of a phone tech at Dell was around 18 months. Despite doing well there (and a birdy told me I was being looked at as possibly being a group leader), I left after a year. I was offered a better-paying low-level sys admin job at a software solutions company a friend worked at. When my Dell manager asked what would it take to keep me there, my reply was, "nothing realistic."

### *What came NEXT*

While Dell trained me well in doing what they needed me to do, I was hellishly aware of how much I still didn't know in general. That was made painfully apparent when I did my phone tech interview for my next employer, PSW Technologies. They were a recently IPO'd company whose business model consisted mainly of partnering with large, established companies (like Canon and IBM) to solve their internal software issues. I bombed hard. I couldn't even explain what a server was, much less how to set one up. Thankfully, my friends that worked there convinced the IT department to give me a chance, that I was just green but could figure it out. I was initially hired to do system builds and assist the help desk in fixing employee's computer issues. No answering phones! I couldn't sit idle for more than five minutes without feeling like I was

going to get in trouble, Dell's phone system had scarred me a bit. We were a mixed NT/Solaris shop that had just started phasing out all their NEXT computers (the company Steve Jobs had run whilst being on the outs with Apple). I actually was allowed to keep one of the old NEXT 'pizza box' models at home. Solaris is a UNIX-based desktop OS and more than a bit of hair-pulling was involved in learning the new (to me) command-line programs. I never want to have to edit a text file in vi again. On the Windows side, I was floundering my way through learning how to create disk images and do OS installs over the network. I was going to need a Mr. Myagi soon if I was going to keep up with everyone else. That's when I decided to approach the Sphinx-like, hulking, black-bedecked silent character we eventually came to call, The Booda. His real name was John. A UT grad in electrical engineering. A closet paramedic, but far too heavy to be effective at that occupation. He quietly lived vicariously through television shows. Wore a black t-shirt and black dress pants every single day. He was the main network admin and a badass at all things UNIX. You would never guess that it was Spice Girls playing in his large over-the-ear headphones while he tweaked our mailservers and fixed DNS issues. A very quiet person, the most I ever heard him speak up to that point was in quick, hushed phone arguments with his real-life, big fat Greek mother. In Greek, no less. I decided to attempt to befriend him in hopes of increasing my networking knowledge. In return, I would provide him a social life. My approach worked, we hit it off bigly. He would spend about an hour each day with me, mostly in our training room, but I do remember one lunch at Macaroni Grill where our tablecloth was festooned with 1s and 0s as he was attempting to convey the concept of subnetting IP addresses to me in crayon. In turn, I introduced him to my diverse crowd of musicians and slackers, who adopted him like a big cuddly stray. Everyone would lug their PCs to my house where there'd be a LAN party at least once a week. Our boss at PSW at the time was a hyper, happy guy named Todd, who was a fellow musician. He was all over the map, but was really big

on getting everyone out of the cubes and visiting tech vendors with him. I loved these field trips. One one of these outings we learned about video conferencing, which was just starting to be viable, now that most companies had access to T1 or T3 (shudder) data lines. His encouragement led to me pursuing (and obtaining) my Microsoft MCP certifications in Windows NT Server and Workstation.

### *Stuck in the MIDI With You.*

In 1998, while I was configuring servers and evaluating hardware, my old pal live music came knocking once again quite loudly. A former bandmate was in a group that had gotten a deal with Interscope Records and after a few months he had decided the road life wasn't for him. Another musician buddy and I auditioned for the spot (doing keyboard/MIDI/sampler stuff) and the band picked me. I put my IT career on hiatus, got my girlfriend's blessing and hit the road. As the geek in the band, I became our BTS (behind the scenes) videographer and social media (actually just updating web pages, it was only 1998, you know) guy. I didn't have a laptop then, so it involved rolling in a couple of extra road cases into the hotel every night so I could do updates via modem. Onstage I used an EMU ESI 4000 rackmount sampler which used Zip Disks (remember those?) as primary storage. It also had a SCSI (pronounced 'scuzzy' interface, and MIDI (of course). After New Year's of 1999, the band made me a full member and we got to work on a new album for Sire Records (they switched labels right before I joined). We found an old punk producer named Geza X who was experienced in working with Pro Tools and loop-based rhythmic stuff. We checked into a remote studio outside of El Paso, TX for a month and it was tech/hacienda bliss. I was doing a lot of loop construction with Sonic Foundry's ACID program back then. It could take a loop of a rhythm and change the beats per minute without affecting the pitch. Good stuff for pre-Y2K. Our producer would track all the incoming drum, vocal, guitar, bass, and key stuff directly into Pro Tools via

his Mac. Sadly, this was a time when the bottom was falling out of the music industry, they had railed against the encroachment of digital, choosing to attack the early adopters instead of being innovative. We, and a ton of other bands in 1999 soon found ourselves without label support. I saw the writing on the wall and went scurrying back to the IT world, as Austin was becoming a tech boomtown, nicknamed the "Silicon Hills". Music, for me anyway, would only be a hobby going forward, or a revenue source via a variety band.

### *Immigrant Smile*

My aforementioned girlfriend was now my fiance. She worked at a large educational publisher as a QC bulldog for their printed textbooks. There was an opening in their relatively new multimedia department and I managed to land an interview. Fortunately, the managers doing the initial grilling had near-zero technical knowledge. In fact, I didn't even know what exactly the job was until after that face-to-face. I just smiled my digital immigrant smile the whole time and managed to convey I wasn't a psycho. They then flung me towards an actual technical person for a more in-depth interview. I braced myself, but all he did was gripe about the company the whole 45 minutes. I was initially offered a job as web support person who would be helping the marketing department update their corporate web presence. I had done some minor HTML stuff, but hardly anything like this. On my honeymoon cruise in the summer of 2000 (the week before I started work), I was buried in an HTML guide whenever my now wife wasn't looking. On my first day at the new job I learned that the tech guy who hired me and who was going to be my Yoda, had left the company. At that point, "fake it 'till you make it" had to become my mantra. I was using Adobe Photoshop and Macromedia's Dreamweaver (pre-Adobe takeover) to take graphics from the design department and slice them into html-friendly images. Our department had just acquired a ridiculously expensive AVID video capture setup, designed to digitize and edit content,

then go back out to tape, not transcode clips into web-friendly formats, which is what we really needed. I was way more interested in this stuff, so in addition to my normal job duties, I helped design workflows and presets to optimize our tape-to-web process. Over the next few years, I convinced my management to add onsite voiceover recording, DVD authoring, and we started doing smaller video shoots as well. Pretty much whatever I was having fun learning at home at the time eventually wound up being an in-house service offering. This saved the publisher a good deal of dough, but someone once told me there, "no one's ever gotten a blue ribbon for saving this company money". It was wild to watch the denial about the importance of the internet there. They sold books, dammit, and anything web-related was just going to be some ancillary offering. It was an attitude that reminded me of the obstinance of the record labels, prior to their demise. There were a few attempts to create a CMS that would hopefully lead to actual e-books, but there were no standards yet and it was all hopelessly proprietary. All the publishers were reinventing digital wheels. They all waited far too long to take the internet seriously. One enlightened multimedia developer named Tom told me, "This is a ghost ship, everyone's dead, and nobody realizes it." He wound up being correct. Outsourcing became an American corporate tradition in the 2000's. Finally in 2008, that terrible year for so many, our entire department was let go at the same time.

### *Sean the Sound Guy – Owner and Current Employee of the Month*

Being suddenly unemployed after 12 years, turning 40, and having a three year-old son is not a recipe for serenity. I had decided, once I saw the storm coming, that I would need to work for myself. The era of the gold watch was mostly over. I didn't think I would succeed as a multimedia generalist, so I decided to dig deep in the sound world, having spent years as a musician, playing live and doing studio work. I spent countless hours online, attempting to infuse my brain with

equipment and experiences, Matrix-like. No amount of reading about stuff is the same as real-world experience, however. I took part of my severance, purchased a small kit (mixer, microphones, and wireless) and began throwing elbows. I'm happy to report that somehow I eventually managed to create a very broad and diverse network. Over the last decade I've been fortunate enough to be part of really good films and documentaries, NBC and CBS trust me to put their correspondents on the air live, and while I loathe commercials, something I did in December aired during the Super Bowl this year. But the equipment... These days it's an out of control amount of gear, filling my enormo-van. I have learned that you don't own stuff, it owns you. In my next life, I think I'll just be a harmonica player.

### *Ellis Island*

I feel I have lost my immigrant accent. The only times I slip up these days is when I mention the Old Country, where payphones were ubiquitous and there were only three or four TV channels. My 13 year-old digital native hears my accent though, loud and clear. My ex-wife used to kid me that I always seemed to be paying my dues somewhere, which is true. I don't think I'm ever going to be content to do one thing. There's just too much out there. While it's kind of exhausting, it's nice to always have something new to look forward to. It's part of why I'm in the UWW program. Finally earning a degree will bring about opportunities I haven't even dreamed up, using tech that hasn't been invented yet! I know eventually the Curve will leave me behind, and I will return to my analog homeland to raise some chickens and show my great-grandkids pictures of what trees looked like.