Daniel Craig

Personal Statement

It was 3 a.m. and the tick-tack tactile sound of keystrokes with the odd click of a mouse here and there carried through the foyer of my family’s home. I was 15, trying to be dead silent so my parents wouldn’t wake up, and had a private server of World of Warcraft in the background with a Wikipedia page up about Deep Blue, the first computer to win a game and match against a reigning world chess champion at the time of its creation. I was in awe that someone could madk a machine to do that. “That’s almost like the sci-fi movies! Wouldn’t it be cool if we could program computers to play video games perfectly for us? How did they do that?” I now look back on that memory as probably the first time data science, machine learning, and the like caught my interest. These moments continued through college.

An avid fan of a MOBA game in my college years, I played Dota 2. It is a 5v5 team based game where the players try to level up fantasy inspired heroes to destroy the enemy headquarters. Known to some as one of the most strategic video games ever and OpenAI was announced. It was an “A.I.” that replaced the players and took down every professional team the world had to offer. Again, the same thoughts from being 15 repeated in my head. I sidelined it as something that was not really possible for me.

I remember sitting in Dr. Fay Payton’s capstone course my senior year at NC State and really feeling how fascinating it was that I could grab D.H. Hill’s library room usage from motion sensors to then inform the library usage statistics. The information alone was giving me ideas on what the library could do depending on what story the data told. Heavily trafficked areas, which study areas did students prefer, correlations between weather, time, day, or what restaurants were open in the Brickyard food court at the time. During that same semester, I remember sitting in Professor Fowler’s classroom as she taught us how to use regression to help create models for predictions and see correlations between variables. This was so cool but I was already a senior in Bus. Admin with a concentration in Information Systems. I took Calculus II and III as electives and when my friends asked why I always said “for fun.” I looked at the feasibility of double majoring in statistics while I was a junior, but my mental health gave way. I decided to graduate in four years to avoid debt and get to work as fast as possible. Luckily my parents helped pay for a therapist during at the tail end of my junior year through my graduation.

I graduated and went to work at Kioti located in Wendell, NC. In my free time, I started Andrew Ng’s Machine Learning course, and followed along some python tutorials that were available to me through work. I knew I needed more structure for me to be effective. I paid for a session with a Machine Learning engineer who gave tutoring through a service called WyzAnt and he mapped out for me the material I would need to master. I started to explore the options of continued education under a university. I knew I wanted to be a part of this. Despite my fear of being an unviable applicant, I used NC State’s Master of Analytics as a benchmark to get started. I spoke with Valerie, head of admissions, a few professors, and chose ST517 and ST518 as courses to help prove my efficacy in academia since my undergraduate GPA was not to my standards. Unfortunately, just as my first attempt at ST517 started, ransomware crippled the company for about two weeks. My manager left a few months before and we had yet to replace him, leaving myself as the sole individual largely responsible for recovery and prevention. I forget the number of hours each week that I worked for those two weeks and the following two months. I do recall the first two weeks being near 100 hours. The following weeks were somewhere between 60 to 70. Getting Kioti operational may have taken a week and a half, but true 100% recovery took months. Ransomware hit us just as my ST517 course started. I think I achieved a C- in that class and re-took in the summer semester for a B+. Dr. McGowan was an absolutely brilliant teacher.

The memories in my high school and undergraduate years were unfortunately drowned in my struggle with mental health Although I am a firm believer that anxiety or depression is something an individual will always need to manage such as diabetes or a speech impediment, the memories I recount here are some of the tools I’ve been gifted with, by those around me, that re-ignited the spirit I needed to fight that battle and re-discover my passion for this craft and how I can use it.

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“WHAP”. The room turned sideways as a sweaty torso bounces off the mat, with arms trailing after in the air. You would’ve thought I was in a cartoon with how fast my legs swept out from underneath me.

Between heavy breaths and a mouthguard, a stern aggressive voice grunted out from Duque: “Get up man, I know there’s more in you. The round ain’t over for another two minutes. You didn’t come this far to only come this far.”

At Duque’s prompting, I stood back up.

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He opened the car door and grabbed his luggage. It was a baby blue sky, a shining yellow sun, and a couple puffy clouds kind of day. The sound of jet engines soaring above us and tires gripping asphalt as cars turned out of the drop off area echoed underneath the concrete canopy. “Do you think you’ll like your Ph.D program, man?” I said as I hugged my friend Yoshi. We shared a few moments before he stepped towards terminal 4 at the RDU airport. He laughed in response. “I hope so. I want to see what I can find out about fractures and material stress. There’s something about it that’s just interesting to me.”

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I sat in a room that looked like whomever composed elevator music was allowed to furnish a room. I was sitting on a couch with a fabric design of flowery, viney plants wrapping around each other. The cushions were too rigid and springy. I had no idea how this couch made it out of the factory. “Did anyone even sit on this before they shipped it?” I thought to myself in disbelief. An interesting device sat outside the door that mimicked the sound of air being pushed out of a pressurized half-blocked tube. Not too distracting to hold a conversation, but just enough background noise to stifle the attempts of unwanted ears. It was meant to deter others from listening in on a private conversation that could only be described as a broken person deteriorating in front of another and daring the other to prove it to himself he was worth caring about, with an arrogant self-assurance it wasn’t possible. The conversation grew dark and somber.

With a gentle and elegant tone, Dr. Snow softly caught my rapidly descending mental state with the following words. “Daniel, I think that’s a bit unfair to yourself. If someone was talking to your friend the same way you just talked about yourself, what would you tell your friend?”

My head raised a little. I had some tears in my eyes. The sinister voice in my head aghast that it didn’t get the response it wanted. She wasn’t saying it was right and that I was useless. It thought that surely anyone who could harbor such a self-destructive and insidious will would be worthless from the start… it mumbled a few other words in dying defiance, but as it kept talking, the quieter it became. The vile circular cloud around my head was lifting.

I raised my head a bit, regaining an amount of belief in myself as the pitch black tar in my chest started to melt to the warmth another person was emanating for me. I responded; “I’d tell them it’s not true and to keep trying.” Dr. Snow lips parted to reveal one of the most heart warming smiles I had ever seen. “That’s what it’s all about, Daniel.”

With glossy, wet eyes, I chuckled a bit as an oddly familiar childish joy appeared in my chest. It was an innocent emotion similar to seeing an old friend from a time you almost forgot about. “Maybe I was a bit too harsh on the couch,” I thought to myself.

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In the background, the news announced the government’s lockdown mandate as the colossal tidal wave of COVID cases continued to rise. It was after 5 p.m. and I casually knocked on the COO’s doorframe. She routinely left it open, unlike what I’d expect from “too good for you” executives. She motioned me in with her hand.

“What do you think will happen with Kioti with all this COVID stuff is happening?” I asked.

My COO slowly but calmly reassured me. “I’m not sure, Daniel, but I know we have people we need to take care of.” Despite the part of her that could’ve been worried, she made her priority clear to me and with it, a lesson I hope to never forget.

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No one could log into their computers. Operations had ceased. 200 employees and a company were not even crawling. The people that have helped me grow, given me opportunity, and shared jokes with me in the breakroom needed my help. There wasn’t anyone else to turn to. After several hours of breaking into my own system, I found the first inconspicuous text file reporting in a professional tone that it would restore access for a ransom. After gathering myself, I walked towards my chief officers, who were sitting in an office speaking Korean. My inner monologue was brief; “Only lord knows what they’re talking about, but you have to do this.” As they saw me walk towards, they beckoned me inside. In a somber tone, unsure of what was about to happen, I calmly reported to my superior:

“We have been compromised by a specific account that we knew was suspicious. It was associated with a development project and had elevated permissions. I can confirm this is ransomware. It could’ve been stopped had we had certain systems in place, but I should not have taken the chance to leave it activated, even at the cost of development. You may have questions at this point whether you should still employee me, and I don’t mean to distract from that conversation, but with your permission… I’d like to focus on getting us up and running again.”

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“So, now that you’re a big doctor and all… what have you learned?” I said with a mischievous smile.

In a solemn tone, my brother replied. “I learned how to help people.”

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“I hope I can provide to others a community like yours. I think it’s a sign of a great person.” I said a bit shyly to Brandon, my coach’s coach and the owner of Gracie Raleigh, a local BJJ and Kickboxing gym. It was his birthday and everyone came out to celebrate at the brewery downtown. “I think it’s awesome I was able to help Evan train for his fights and get to another gym so he can go amateur. I know I wasn’t his best competition but I never would’ve met him if you didn’t have this gym.”

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Above are a couple of the moments in my life that I think have defined my growth as a person. It started as a spark to chase after something that seemed like science fiction. Then that story laid dormant to a deadly adversary I was lucky enough to learn from with the help of those around me. That spark answered my call to arms to overcome the challenge of depression and anxiety in my life. I like to imagine that spark as a stable camp fire providing warmth to those in the area. But now, I’d like to turn that campfire into a roaring blaze that can fuel something greater than itself. I would like to grow myself into a person I am inspired by. I think the way to achieve being able to impact my community, and provide others the opportunities like I’ve had, is to use that passion I’ve found for this field in computer science and information technology. I hope to one day be worthy of providing to a community those life lessons I experienced. From those experiences, I have found the beliefs that drive me to continue. I believe it a privilege to pursue this passion and that work you may not want to do is required to earn it. I believe higher education is a way for me to have a greater impact on the world around me. I believe that data science and the applications of statistics in guiding automatic decision making by non-humans is the single most interesting topic I have ever come across. I’d like to learn more about it and would be honored to pursue that at NC State.