Mark Kim

Essay 2

My life story is one that contains many surprising turns which is the basis for a rich and diverse history that forms my identity. Growing up, I had parents whose well-intentioned but punitive attempts at improving my academic performance led to my deep resentment of scholarly pursuits. Unfortunately, as a result, I found myself floundering in school despite possessing a healthy curiosity for all things. I had a suspicion that I was interested in STEM subjects and could succeed in a STEM field but lacked the self-awareness and personal fortitude to succeed in school. This continued through early childhood into adulthood and resulted in my withdrawal from university for a time.

After withdrawing from school, I spent the following years working and eventually owning and managing multiple businesses ranging from retail printing to food service. In those years, I learned much about iterative processes: planning, analysis, implementation, testing, and evaluation. As a business owner, these tools were my livelihood; without leveraging them consistently, my business would suffer, so I performed this perpetual ritual constantly. Over time, however, I had come to recognize that my true interests and passions did not align with my businesses and the markets they were operating in. Nevertheless, it was exactly this entrepreneurial odyssey that helped me develop a broad set of skills and rediscover my past strengths. The business acumen that I gained over time made me increasingly cognizant of the emergence of big data which, in turn, rekindled my natural inquisitiveness and motivated me to enter back into scholastics with a newfound passion and the personal tools to succeed.

Over time, it became evident to me that juxtaposed with big data was an abundance of bad actors willing to use it to exploit our primitive impulses to subsequently compel us towards decisions and actions that benefit them alone. This led me to wonder if we could leverage these

technologies in constructive ways to improve our lives. My own experience of being adrift from insufficient self-awareness and my subsequent return to school, motivated me to learn what inspires such change. Can these tools be used to discern the unknown factors that inform and incite life-(re)defining transformation? I wanted to comprehend how people find their interests and passions and the hidden drivers that move them towards that end. Furthermore, I aspired to find out if it was possible to help people affect positive change in their own lives.

Since my re-entry into academia, my goals have not changed significantly, but my roadmap has. As is common in any journey, I explored different routes, each contributing to and honing my interests while also preparing me for doctoral study. My early research experience in Statistics and then Mathematics pedagogy allowed me to recognize a latent appetite for research. I also quickly understood that a strong foundation of Mathematics would better prepare me for the type of research that I wanted to perform, so I added it as a second major to my Computer Science degree. In the following years, I aggressively sought out any and all opportunities that might be related to my research interests: an NSF REU at the University of Houston on affective research; a research engineering internship that investigated clustering of phishing emails; leading an early exposure to artificial intelligence program for college first year students; and a research project using large language models for student advising. Upon completing my bachelors degree, I advanced to a Data Science and Artificial Intelligence masters program to bridge the gap towards a doctoral degree. As I have been exposed to more research and teaching opportunities, my determination to pursue and succeed in a doctoral program has only increased. Research and teaching has become my greatest ambition.