

## **Gavin Brumfield IAA Personal Statement**

Traditionally, the most pivotal question posed to a young adult is, "What do you want to do when you grow up?" In my case, the answer was often preconceived. "You're going to be a doctor like your dad, right?" was the assumption made by most of those around me. From a young age, I found myself immersed in the realm of medicine: sitting on the sidelines with my father at college sporting events, tinkering with practice suture kits, and even shadowing sports physicals. The path seemed set, the expectations were clear, but still, I felt as though something was absent— like a puzzle with a missing piece.

As I delved deeper into the world of medicine and its intricacies, I began to explore the world of data and analytics. The more I learned, I realized predictions, like diagnosing illnesses, were rooted in a web of information, patterns, and interpretations. It was then I discovered my missing piece— analytics. Much like a physician deciphers symptoms to arrive at a diagnosis, I found myself deciphering data to make predictions and informed decisions. The synergy between medicine and analytics became evident as I recognized that analytics was a powerful tool that could complement and elevate the field of medicine.

This revelation ignited a passion within me, and I embarked on a journey to further understand analytics and prediction. It was no longer a predetermined path but a chosen one, guided by a deep sense of purpose and belief that, through analytics, I could make a significant impact on the world of healthcare and beyond. This fusion of my medical background and newfound passion for analytics has become the driving force behind my pursuit of a career that bridges the gap between data and healing.

My academic journey at NC State has been a story of adaptability and transformation. Initially enrolling in the Human Biology program with medical school aspirations, I encountered a drastic shift. The unique challenges of the pandemic and the transition to remote learning compelled me to reflect on my career goals and motivations. After thorough deliberation, I made a critical decision to shift my focus. This transformation led to a significant conversation with my parents, where I conveyed my decision to explore a different path within the realm of medicine, one that was unconventional yet driven by purpose and passion.

Despite the initial difficulties of moving from a memorization-based biology curriculum to a more conceptually demanding field, I transitioned to a degree in Information Technology with unwavering determination. Through this curriculum, I honed my skills in various programming languages such as SQL, C#, and R, as well as gained proficiency in backend development of databases using tools such as MySQL Workbench and PostgreSQL. This transition has not only challenged me but also enriched my foundation in the evolving field of technology and data analysis.

In my academic curriculum, I have explored both STEM and business statistics. Their differences aside, these courses provided a unique and well-rounded background. STEM statistics enhanced my understanding of theoretical concepts and their application in research. On the other hand, business statistics revealed the practical use of statistics in corporate

decision-making and process optimization. This dual/cross exposure has equipped me with the confidence to merge theory and real-world application, which will be vital in approaching the statistical concepts presented by the Institute.

During my professional journey into the field of Analytics, I served as a Solution Architect intern at Syneos Health. Although I initially felt intimidated by my limited experience in the field, I openly admitted my lack of knowledge. I took the opportunity to demonstrate my commitment to learning and my enthusiasm for tackling challenges. This role granted me substantial autonomy, enabling me to undertake and complete projects with the resources I deemed fit. This environment was instrumental in fostering creativity and nurturing curiosity, qualities I consider indispensable for continuous learning and growth. One standout project involved crafting a dynamic live dashboard for the Enterprise Architecture team. In this endeavor, I undertook the challenge of ensuring the precision of data transfers between their pre-existing Change Management database and their newly implemented architecture platform, LeanIX. To achieve this, I harnessed API connections, custom-engineered Power Automate workflows for data extraction, and executed SQL queries to monitor the transition's progress and address inconsistencies. Notably, my prior exposure to tools such as PowerBI, SQL, and API connections was limited. However, I embraced a trial-and-error approach, leveraging my determination to fashion a functional dashboard. The project was a success and through hands-on application of the concepts acquired in my courses, I learned a great deal. This experience significantly reinforced my excitement and dedication to pursue a career in analytics.

My conviction in the Institute's potential to enhance both my professional and personal growth was solidified during an information session, where the insights shared by alumni left a strong impression on me. During the session, they emphasized the program's intensity, its collaborative essence, and the vital importance of placing trust in the learning process. The emphasis on teamwork within this program resonates profoundly with me. This aspect, sometimes underappreciated in academic settings, is an area where I believe the program will help me excel. Through my academic and professional experiences, I have realized the success of analytics is intertwined with seamless cooperation of teams working together to develop, communicate, and act upon insights. Another compelling facet of this program is its commitment to in-house resources and a dedicated team of full-time professionals. This strategic choice ensures students receive the utmost attention and individual needs are addressed. Furthermore, the faculty's deep understanding of students' experiences complements their dedication to delivering tailored support, making this program an ideal environment for both professional and personal growth.

I am enthusiastic about joining the Institute of Advanced Analytics, where I foresee a unique opportunity to not only enhance my skills but also enable me to leave a lasting impact in the realm of analytics. If granted the privilege to join the Institute for Advanced Analytics' Master of Science in Analytics degree program, I wholeheartedly commit to embracing collaboration, welcoming constructive criticism, and eagerly embracing the challenges that the program presents.