Since childhood, I have harbored a strong interest in numbers, as evidenced by how quickly I could memorize phone numbers and decompose them into prime numbers, just for fun. Over the years, the allure of extreme logic and precision in math has always captivated me as my comprehension gradually matured.

Upon establishing a solid foundation of math knowledge through years of studies, I eagerly sought opportunities outside the classroom to apply my theoretical knowledge to real-world practices, which deepened my academic curiosity. For instance, I creatively applied knowledge of the Lagrange Point to calculate the proper position of the perigee during the Space City Competition, hosted by NASA. During the competition, I successfully employed various mathematical modeling concepts, including potential functions and integration methods.

My exploration of the math world continued as I ventured into the challenging realms of data science by collaborating with my classmates on a case study about identifying and categorizing coins using AI and machine learning theories. From understanding data collection and classification processes to building CNN (Convolutional Neural Network) models using Python, I marveled at the magical power of the underlying mathematical principles, and my curiosity was further piqued.

Furthermore, I had the opportunity to apply theoretical knowledge to analyze financial data and identify financial patterns under the influence of my father, who is a fixed income trader. It ignited my interest in exploring the correlation between mathematics and finance. For example, I used filtering methods to remove the seasonality feature in predicting prices for government bonds to increase accuracy. In this self-learning process, I further realized the pivotal role of mathematics in financial trading.

Looking back, the fulfillment that arose from each challenging learning experience was beyond compare. It has fueled a burning fire in my heart, guiding me in my future studies.