***(Maximum 400 - 500 words, double spaced, 12 point font): Describe how your academic and professional background prepares you for success in the Business Analytics program, what your objective is in pursuing a Business Analytics degree and the reasons for which you are applying to Carnegie Mellon.***

Premature deindustrialization has trapped Indonesia in the “middle income level” for 29 years. The possible key factor causing this was Indonesia's inability to compete with China's lower manufacturing costs. Consequently, we’re forced to shift our focus from manufacturing to the services sectors. “If only Indonesia was able to compete with China, then would Indonesia be able to return to its industrialization peak and attain “high income level” status?” I asked myself this upon learning about our dismal economic history.

As I took an optimization course in undergrad, I learned Operations Research and realized that Indonesia couldn’t compete with China due to the inefficiency of our manufacturing process. So, I delved deeper into China’s industrial history and discovered that China used data analysis and optimization to reduce cost and increase production capacity. Seeing a potential where Indonesia can also use data analysis to optimize every step of its manufacturing process reinforced my decision to pursue a Master’s in Business Analytics.

Throughout my undergraduate studies, in addition to taking Optimization for Prescriptive Analytics and Statistical Foundations of Business Analytics courses to become proficient in data analysis and optimization, I’ve been actively seeking internship opportunities to gain experience in the applications of data analysis in optimization, and to identify the factors that could affect operating costs and revenues. My first data analysis experience was at Sayurbox, an e-grocery startup. Here, I was able to understand the end-to-end B2B and B2C supply chain process for short-lifecycle products. I learned the value of good data management and how to use its analysis to create an optimized network process flow, which in this case includes inventory management, transportation management, and demand planning with the product’s shelf life as its constraints. This knowledge will be useful in reducing Indonesia’s industrialization cost.

Moreover, I think that one important factor in modernizing Indonesia’s industrial sector and regaining its industrialization peak is gaining experience in business operations and technology implementation. Thus, I took an CEO office internship at Finku, a fin-tech startup, where I also honed my leadership and business skills. The flexibility to rotate to other roles, like business development, partnership, and tech-product management, allowed me to have a bird’s eye view of a business. I discovered that problems in early-stage startups are about determining a suitable end-to-end system that heavily relates to operations management.

My ambitions for Indonesia’s industrialization will be fostered by pursuing a Business Analytics at CMU. Indonesia’s current industrialization practices still have many manual labor redundancies and inefficiencies that led to an increased likelihood of human errors and, thus, increased cost. CMU’s Machine Learning Fundamentals and Machine Learning for Business Applications courses will allow me to build the foundation of machine learning and implement it in manufacturing, such as maintenance scheduling or machine failure prediction, to minimize human errors. Additionally, CMU’s Graduate Consulting Club and Graduate Entrepreneurship Club will equip me with rigorous critical and analytical training for business operations while also enabling me to develop a global network of potential industry leaders, which could boost Indonesia’s manufacturing exports and imports.