Statement of Purpose

I'd always possessed an affinity for different mechanisms and lego toys — my main major is Mechanical Engineering, after all—but I'd never considered integrating my passion for construction toys with my love of engineering until my first year of University, where I studied the main engineering terms and notions related to mechanics, electronics and mathematics. Generally, during my 4 year academic journey, I enrolled into courses titled Advanced Control Systems and Mechatronics Systems Design through which I am introduced with basics of electrical engineering and discovered various technologies as microcontrollers, sensors and actuators. I thought that this baggage of knowledge is enough to construct amazing robots and devices. However, I realized that in practice I know very little. Later, I had an opportunity to use obtained information in real projects. In my sophomore year, I was so absorbed in working with a project to create a Soccer Robot, that sometimes I didn't notice how 5-6 hours passed in the computer laboratory, since I had an opportunity to apply my programming and designing skills on it. The following year was more productive as I registered into Industrial Automation course to learn all the automation processes that occur in factories and plants. In addition to deep theoretical knowledge in the industrial sector, on this course, I did my second big project to create an automated barrier. The gate was controlled through a mobile application and was equipped with a proximity sensor, which decreases the risk of car integrity damage by preventing the closure of the barrier. Since obtaining my publication of this project in IEEE, my interest in engineering and programming has only grown stronger.

Next project I did is one of the significant achievement for me as for a developer and become valuable product for *Technodom* electronics store chain and its consumers. Last summer I passed selection on an IT internship by *MethodPro* program sponsored by government, where I intensively studied "python", web development and machine learning for the first month. After successfully passing the exams, we worked in a 3-developer team, to made a widget based on a neural network for the *Technodom*. Whole second month we spent on that and at the end of internship period the company bought our product. Lately I did another project related to drone navigation via Neural Network on Aerodynamics course in University which showed me a new look at the possibilities of Neural Networks. That gives me confidence that I am growing up further in developing valuable products.

From the beginning of this year, I've worked in a small company as a junior engineer, where I am involved in a business engineering project and have serious responsibility in developing automated BMS (Building Management System). In my future plans, I am going to obtain scientific knowledge into business practice for leadership and technical and analytical skills, in order to make product developing processes more optimized and faster.

Despite my experience in science and engineering, I lack both basic knowledge of business communication and entrepreneurship, which, I believe, is the main aspects of managing a successful business; thus, I believe the Nazarbayev University's program in Engineering Management will not only improve my technical background but also provide me with the tools, support, and foundation necessary for ultimately becoming a successful senior lead analyst. Your Master of Engineering Management program offers an ideal interdisciplinary environment wherein I can develop engineering knowledge and get close to the business itself. A master's degree will also assist me significantly in my career.

Truly, I am committed to this intellectual journey, and to the Nazarbayev University itself. I have met personally with faculty members, Konstantinos Kostas (for Computer Aided Engineering Design) and Yerkin Abdildin (for Research Project) and their research interests most closely align with my own. Attending the Nazarbayev University for Engineering Management studies is a natural step for me, one I'm prepared to take and work tirelessly for, with both diligence and alacrity. I've made my decision. Now, I look forward to yours.