As soon as I was old enough to know the differences between the various branches of science, I have wanted to be a physicist. Ever since, I have strived to learn, to understand, to begin walking on what Roger Penrose would call the Road to Reality. Around the age of twelve, I began avidly reading physics books. Then, in high school, my knowledge of mathematics started to grow at an accelerating rate as I added calculus texts to my summer reading list. Upon completing Calculus III and Modern Differential Equations at MCC my senior year, I decided to double-major in physics and mathematics. Now, after earning a 4.31 GPA in 17 credit hours last semester (including an A+ in Physics 150), I am enrolled in, among other classes, Physics 151, Math 371 (Advanced Calculus), and Math 410 (Intro to General Topology). I am also a member of the ASU chapter of the Society of Physics Students. Whenever I find a free moment from homework, though, I try to keep up my tradition of self-study, reading about such subjects as tensors and the calculus of variations in the general theory of relativity. I believe that my love of physics, my hard work, and my success so far qualify me for this scholarship.

I have a great interest in particle physics. It has always appealed to me as the most fundamental area of human inquiry into the workings of the universe. I am drawn to the idea that all phenomena, from the properties of the elements to planetary motion, can in theory be derived from a few equations regarding the interactions of unfathomably tiny particles, if they may even be called particles. And that is why I may become a mathematical particle physicist. I find group-theoretic attempts at unifying the fundamental forces to be fascinating, at least to the degree I understand them. Perhaps someday I will embark on the quest for the theory of everything as a research professor, even undertaking the attempt to create new mathematics to understand the world as my favorite physicist, Isaac Newton, once did.

But, I must say that my plans are far from concrete, because I have other interests, as well. I wish to be a part of the relentless march of progress that represents applied science. I dream of perfecting nuclear fusion or solar power, of sending cleanly-generated electricity through superconducting wires to every home on Earth, and of controlling the network with quantum computers. Little would delight me more than to be the founder of a company that brought such revolutionary technology to the world.

I aspire to do both of these things, and time will tell what I can actually achieve. Some might call my dreams unrealistic. I might say theirs are not big enough.