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I was raised by botanists in the American West, and the importance of science and observation was emphasized throughout my childhood. This environment provided me the perfect landscape to ignite my interest of weather and nature. As an undergraduate at California State Polytechnic University, Humboldt, I pursued a bachelor's in physics with the intent of applying it to a degree in engineering or interdisciplinary science. My love of physics and desire to understand the physical world around me, combined with my interest in weather, lead to me pursue a M.S. in atmospheric science at the University of Nevada Reno.

As a candidate for an M.S. in atmospheric science, my proposed research is to simulate smoke transport in reduced gravity. The goal of this research is to gain a better understanding of smoke transport in lunar and Martian habitats. This will be accomplished by using data from a recent series of combustion experiments of various spaceship materials as input and boundary conditions for the NIST software known as Fire Dynamics Simulation and Smoke View. The gravitational constants to be tested will be that of the moon and mars in the ORION space module. In addition to looking at smoke transport in reduced gravity, the placement and flow rates of ventilation in the ORION space module will also be tested and optimized to improve smoke detection. In the future I want to be involved with instrumentation research and development for uses both here on earth and for space applications.