Personal Statement
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Robotics PhD

The opportunity to apply my drive to investigate questions and satisfy my curiosity has always been important to me. My high school physics teacher and robotics club provided me opportunities to work hard and be ambitious to discover how robotics can be used as a tool to impact others, which influenced me to pursue engineering. As a result, I am now a senior studying Robotics Engineering at Arizona State University and conducting robotics research in Dr. Dan Aukes' IDEAlab at Arizona State University. This undergraduate research experience has, in turn, inspired me to pursue a graduate level degree in Robotics and continue conducting research in robotics.

My interest in engineering began in high school where I particularly enjoyed my physics classes. This was in-part due to our excellent AP Physics teacher, Mr. Middleton, who challenged us to break down problems analytically. For example, when we were learning about circuits, we were given a set of electrical components and instructed to design our own investigations to discover the laws that governed them. This opportunity sparked my curiosity, and after observing how connecting ceramic resistors in series and parallel affected the heat they generated, I was able to deduce Ohm's Law for power.

My curiosity and passion for investigation carried into my involvement in my high school's robotics team. For example, I decided to lead my team in investigating a new open source Real-time Operating System that had just been released for our microcontroller. Although this required learning a new API and teaching myself more about the C programming language, it paid off in faster performance, allowing us to use more advanced control algorithms. The freedom to learn about control algorithms by exploring the robot's behavior through testing was then a perfect outlet for my love of scientific inquiry. This leads to my goal to foster the same love in the next generation through the tool that inspired me: robotics.

In high school, I learned the power that comes from collaborating with the like-minded individuals on my robotics team as we critiqued, challenged, and encouraged each other. The opportunity to apply my knowledge was what got me interested in robotics and now learning on my own through research has been one of my favorite and most inspiring experiences as an undergraduate. My mentor has served as someone to teach me the skills I need, push me to work harder and go outside my comfort zone, and help me to reconcile issues when I have gotten stuck. I am thankful to have already gotten some taste of this student-mentor relationship as an undergraduate, and I look forward to working closely with an advisor and community of scholars who are all mutually interested in robotics as I complete my graduate degree.