

Laura Martini
Statement of Purpose
Application for MS in the Joint Program of Design

Growing up with impaired family members taught me that the world is not designed to work well for people who aren't among the 5th to 95th percentile, typically-abled population.

My mother was born with only her left hand. Throughout my life I have witnessed her struggle against a world that was designed for right-handed people with two hands. Everything from taking off a watch to cutting food at dinner requires patience, creativity and often help from another person. It is for her that I aspire to make products that work with one hand. I see myself designing cameras where left-handed operation doesn't block the flash or the lens, and telephones that can be used with only one hand.

I also have a mentally retarded sister who wears leg braces. She has difficulty negotiating stairs and completing tasks that require reading or fine motor skills. Her disability means that she demands more reliability out of products than most manufacturers design for. She also has a habit of persistently pushing buttons on electronics to the point of failure, and will destroy slinkies with more efficiency than anyone else I know. It is for her that I see myself designing furniture and toilet seats that aren't marred by frequent encounters with steel leg braces, and consumer electronics that can withstand the most brutal encounters.

My grandmother had her own set of challenges, being both old and vertically challenged, as well as suffering from memory loss in her final years. With her I witnessed firsthand the difficulties that most elderly face, such as remembering to take a complicated regimen of medications and forgetting information like names and what day of the week it was. It is for her that I consulted with AARP and online focus groups to design a clock that makes it easy for the elderly to tell the difference between night and day. It is for her that I aspire to make products that accommodate the needs of the elderly, but are so beautiful and functional that people of all ages will aspire to use them.

Finally, there is my father, who doesn't like to read instruction manuals. He's owned an Apple computer for as long as I've been alive; a fan of their simple user interfaces and elegant design. It is for users like him that I worked at Apple this past

summer and helped create a pleasant user experience where the computer adjusts at the slightest touch and is practically silent during use.

Everywhere I look I see design problems that need to be solved. I am interested in the mechanical engineering aspects of product design, specifically as it pertains to accessible designs for the elderly and disabled. Being an effective designer requires a combination of engineering ability and an understanding of human needs. At Stanford I plan to combine my background in mechanical engineering, human factors and anthropology to research new technologies and designs that enhance the quality life for all people. This past spring I worked on a composter for an inner-city gardening program that serves underprivileged youths. This particular design reduced the amount of time it takes material to compost, allowing the program to efficiently use their limited space, and eliminated the manual labor required to sift, making it a more enjoyable task for the program participants. This project allowed me to see firsthand the positive impact that design can have on a community.

I am particularly interested in Stanford's program because it will allow me to explore product design and development from both the artistic side and the engineering side. I am excited about being a member of a design community of professors and students, as well as representatives from industry who share my passion for design. With this degree I would ultimately like to start my own design firm like Cooper Perkins, a small engineering design firm in Boston that I interned with this past January. Going into such an industry would allow me to leverage the people I meet and the experiences I have in graduate school.