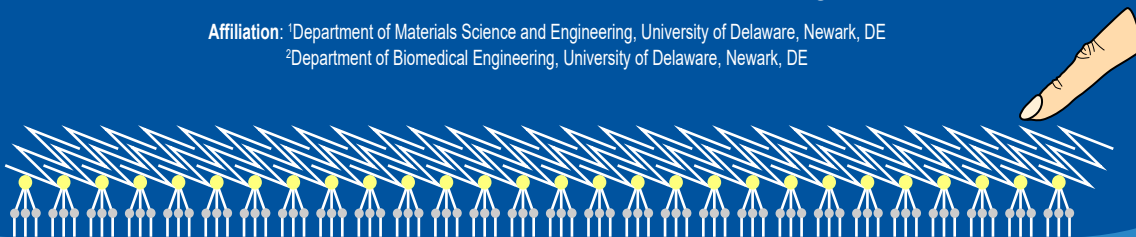


Are you interested in participating in a study to help improve tactile aids?

Research: Lab of Dr. Charles Dhong^{1,2}

Affiliation: ¹Department of Materials Science and Engineering, University of Delaware, Newark, DE

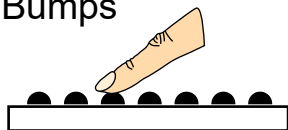
²Department of Biomedical Engineering, University of Delaware, Newark, DE



Graphic above displays a cartoon finger touching a simplified rendering of the chemical structure of a self assembled monolayer

Research Overview

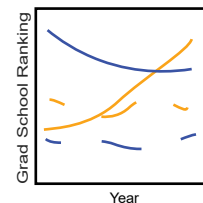
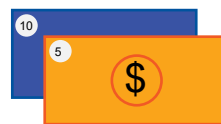
Bumps



Surface Chemistry

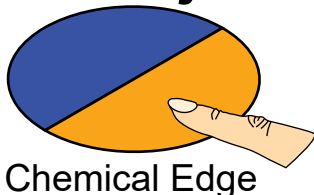


New Tactile Aids

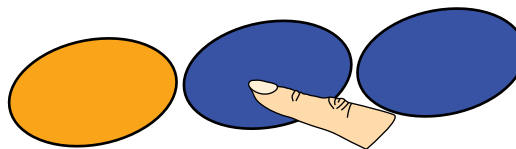


Graphic above displays a flow chart starting with a cartoon finger touching bumps on the left, then a circle that is half orange half blue to represent two surface chemistries on a surface, followed by a blue ten dollar bill with an orange five dollar bill next to a cartoon graph of grad school rankings by year depicted in solid orange and blue and dotted orange and blue lines to depict lines made of different surface chemistries to display some ideas for surface chemistry driven tactile aids

Human Subject Testing



Chemical Edge



“Odd Man Out” Testing

Graphic above depicts two human subject tests you may be asked to participate in: the first (left) touching a silicon wafer with two different surface chemistries depicted by the colors blue and orange and identifying the transition location between the chemistries (colors), or touching series of three different wafers, two blue and one orange (right) and deciding which one feels different (e.g. orange)

The goal of the study is to reduce barriers to accessibility by making tactile aids easier to read, more informatically dense, and easier to build. Participation is easy and involves touching small, safe material samples with your finger and providing feedback based on your perception such as comparing, discriminating, or describing samples. The duration of the study will last approximately one hour and there are no apparent risks or discomforts but is completely voluntary. Each participant will be compensated a \$20 amazon gift card, even if you decide to stop for any reason during the test. Participants can be minors or adults but must have low vision or blindness and have taken high school geometry. Participants who are minors need permission of a legal guardian present at the time of consent. Those interested and are residing in Philadelphia and greater Philadelphia region, Delaware, and Upper Maryland please contact dhonglabrecruitment@gmail.com. Lab members can travel or meet interested participants in a convenient location to conduct the study or the study may be conducted at the University of Delaware.