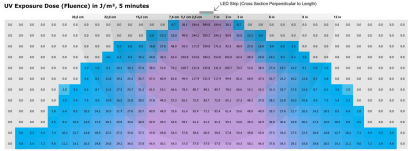
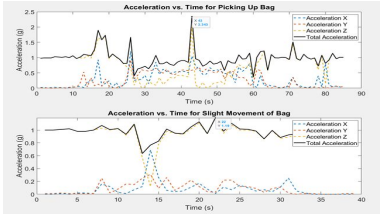
Bag Sanitization System

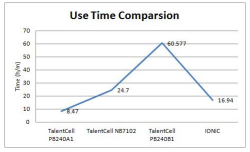
Engineering



Research UV exposure and dosage density required to produce adequate disinfection rates for strains of bacteria, viruses, and biological growth associated with health deterioration and sickness

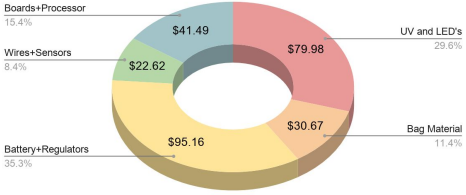


Finding acceleration threshold to alert the user that the bag has moved by experimenting with moving the bag over several trials



Based on the total power used by all electrical components, calculate the running time for battery. Also combine the weight, voltage used and other factors to get the optimal choice on the battery.

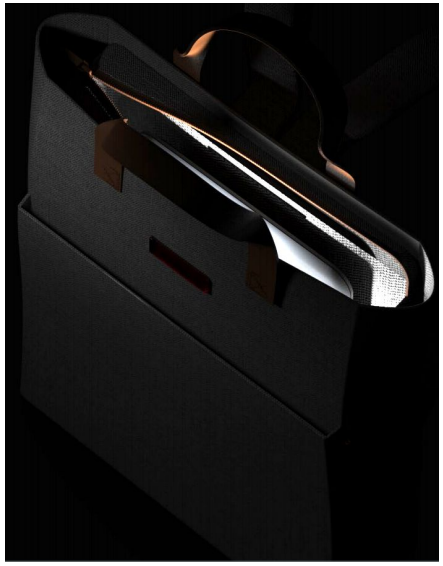
Prototype Budget

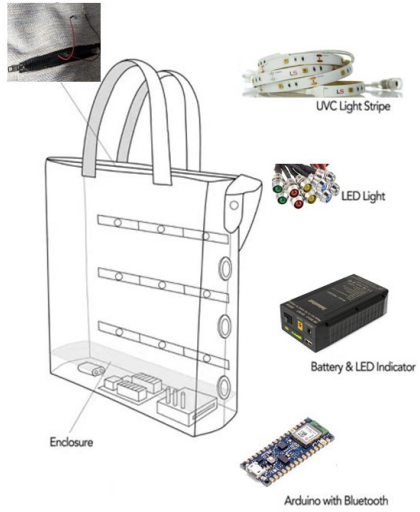


Project Goal

Our goal is to create a portable product to clean and disinfect everyday items of young professionals between the ages of 25-35. UV-C technology is used to remove 99.99% of germs, bacteria and other viruses while preventing the UV rays from harming the user with safety precautions. This product would be beneficial even beyond the COVID-19 pandemic.

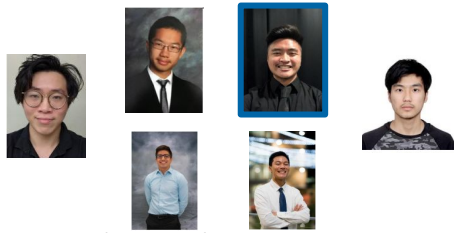
Design Prototype





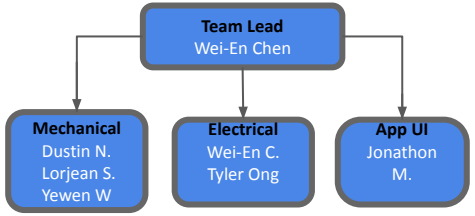
Timeline: Winter 2021

Team Contact



Team Members: (Left to Right) Wei-En Chen, Dustin Ngo, Lorjean Sagabaen, Yewen Wu, Jonathon Mendoza, Tyler Ong
Advised by:
Pip Tompkin | Adam Gromfin | Adam Sbeglia | Farzad Ahmadkhanlou | Vincent Mcdonell
Contact Information:
Team Lead Wei-En Chen: weienc1@uci.edu

Team Structure



Sponsors

SHARPER IMAGE®

UCI Samueli School of Engineering
University of California, Irvine

EDI Engineering Design in Industry