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Flow Visualization
Team First Report
3/7/2018

   This video is a slow-motion presentation of a stream of water falling onto a succulent of what I believe to be of the Echeveria runnyonii variety. My main intention was to see how this succulent may use its design to collect water in order to survive. The leaves of the succulent seem to curl slightly upwards and into the center, allowing it to direct and collect water.

   In order to create my flow experiment, I started by placing the succulent on my table about one foot away from my camera. I used a glass of water to pour a stream of water onto the succulent- aiming for the center of the succulent. The succulent was placed in front of a very white background that I also blew out with two fluorescent lights with six bulbs. It took me about five to six tries to get a good-looking flow. My biggest problem that I had to deal with was making sure the glass was staying out of frame, while also focusing on the pouring itself to be sure it was on target hitting the succulent.

   The visualization technique could have been slightly better in order to see the waters flow in more detail but I also love how natural and organic the resources seem in this experiment, and think that the lighting does a good job at highlighting the water. Like stated above, my lighting setup consisted of two fluorescent lights with three bulbs each measuring at 35w. I used a white sheet in order to have a more solid background while also helping light the scene.

   For my camera set-up, I decided to use my IPhone 8 for capturing due to its ease, and the increasingly improved slow-motion option. I decided to download an app for the IPhone called FiLMiC Pro which allows one to have more access and control over their IPhone camera. I decided to have the app capture at 120 frames per second with my shutter speed at 1/480 of a second. My ISO wasn't stated on the camera settings, however, the app stated that I had selected "moderate ISO bias." The framing of my experiment was very direct and square- not taking into account the rule of thirds to better focus the audiences' attention on the succulent and the water flow. I had a shallower depth of field in order to better focus on the subject being the succulent and its design to make fluid flow a certain way. The slow-motion feature worked very well with the experiment due to the high shutter speed and helped showcase the details of the flow when falling and hitting the leafs of the succulent.

   Overall, I think that this is the best experiment that I have conducted to date due to the well exposed scene showcasing the succulent and water perfectly, in addition to its focus and resolution. Of course, the slow-motion feature helped the experiment better show the fluid flow.