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Dixon, Caleb

The Sound of Revolution

Within the space provided, I will perform an homage to the history of revolution in the south of African Americans. You will find that that fight to be treated fairly both by their government and society still continues.

My performance is a mixture of dance and vocals that encapsulates the journey that blacks have taken to reach closer to justice and equality in America.

The stories I tell throughout my performance showcase the perseverance, pain, fear, and hope that African Americans feel while living in a world that does not cater to them.

This performance takes inspiration from books I've researched in the Dupre Library, as well as songs I've performed during my undergrad at UL, and lastly from black artist productions I've watched.

Throughout this journey, you will watch performances that embody the joys and triumphs of African Americans as well as somber pieces that reflect the struggle that is the "African American experience."

Kumar, Darshan

Experimental Smart Ground-Station Grid

Conventional ground stations or networks of ground stations working with LEOSAT(s) and/or CubeSat(s) do not offer sufficient flexibility or globally scalable transparent coordination of communications, instrumentation, and/or functional or physical actuation at satellites or ground stations to fully exploit these systems so as to operate practically, experimental missions anywhere on Earth, or to achieve highly desirable globally scalable experimentation missions in general. Fortunately, UL Lafayette researchers have invented the ESG-Grid to overcome these limitations. The ESG-Grid is an Internet-cloud coordinated network of one or more LEOSAT(s)/CubeSat(s) combined with a plurality of Terrestrial Participant Devices (TPDs) (i.e. simple portable or mobile smartphone-based ground stations, or same functionality installed in automobiles, boats, planes, drones, tanks, missiles and/or instrumented robots to name a few) where the collective resources and functionality of both satellites and TPDs may be coordinated to achieve novel capabilities, including choreographed and highly economical, automated, transparent, and globally scalable exploration, instrumentation, and experimentation missions, in orbit or anywhere on Earth.

Currently, ESG-Grid is being developed by a team of undergraduate students who are developing and implementing the ESG-Grid via building the LoRa packet schema, RF ground-stations, and the web app utilized to communicate and view information to and from the satellites in orbit. The undergraduate team consists of an embedded system, front-end, back-end, cyber security, operations, and management team. The team expects to have a minimal viable product (MVP) by December of 2025 and hopes to complete their “Phase I” plans by May of 2026. In the MVP, the team plans to be able to receive communication from a mock satellite, decode packets, upload the information to the backend servers, and display the information to logged-in users on the front-end application. The ESG-Grid will also be used as an educational outreach platform where teachers will be able to create lesson plans around satellite information and can receive live data from active mission via lite ground-stations located at their schools.

Lorio, Laura

A Forest in Autumn

Through experimental methods involving trial and error, I embarked on a journey to fill the largest canvas I have used so far in a style reminiscent of the current season and using warm colors that I tend to shy away from. The use of impressionism in my featured work opposes the perfectionist tendencies that can lead to burning out while pursuing my major. Artistic endeavors allow for low stress application of experimental methods, training of fine motor skills in anticipation of future classes, and the opportunity to improve focus.

By establishing and testing multiple different hypotheses in terms of methodology and craft, I learned new ways to express form and color. I made miniature paintings to practice these new techniques and color palettes. To imply scale, I strategically placed minor details. Even though I had an end goal in mind, by the time my brush hit the canvas, I had experienced many epiphanies. Only by being flexible, to accommodate these discoveries, was I able to combine colors I previously never would have tried together. Using the contrast of muted versus clear tones as well as brush stroke order, texture, and layering helped achieve a sense of depth in my work. I applied knowledge of artistic color theory and color psychology to invoke the desired emotions when viewing my piece. The warm tones in this color palette serve as a visual oasis and a reminder of the mindset I wish to maintain. The wind flowing through the grass and sunlight filtering through the leaves encourage viewers to take a deep breath and notice the details of life as it is now rather than stress over the encroaching future.