

## “Data Stream” by Input Output

### About the Artwork



*Data Stream* is a site-specific installation that finds inspiration from the fields of aerodynamics, computer technology, and our modern, data-driven society. Sixty-six LED strips will be combined to create a ribbon of light that will span across the three niches of Terminal Skyway B. This ribbon structure is designed to resemble a commonly found cable used to communicate data in everyday electronics. Similarly, *Data Stream* will communicate publicly accessible data sets such as IAH city destinations, temperature, precipitation, number of landings, and number of passengers that have traveled through the airport over the years.

This data will be recontextualized into beautiful, abstract animations, texts, numbers, and dynamic light patterns that will scroll across the three suspended screens. As a triptych piece, *Data Stream* will be constructed and programmed to present all three displays as one continuous and cohesive piece. Each niche will be painted with *Blackest Black 3.0*, paint that absorbs up to 99.9% of visible light, which will maximize the contrast between the niche and LED ribbons. The wavelength of each ribbon section gradually varies from one end of the terminal to the other. Inspiration for this wavelength composition comes from computer simulations and wind tunnel experiments that show the chaotic airflow behind an airplane’s wings in motion.

The technology driving the installation consists of a custom-built computer system. With security in mind, the appropriate measures will be taken to secure the machine to meet IAH cybersecurity guidelines to

ensure the safety of passengers, staff, and facilities. All data will be stored within the physical hardware of the machine and all network connections will be disabled to isolate any communication with the outside world. The system will have a backup battery supply in the case of a power outage and be programmed to auto-reboot if necessary. Through the integration of flight, technology, and data, *Data Stream* will immerse travelers from all around the world and provide a momentary space for contemplation and enjoyment. As an experimental, digital lab, Input Output is uniquely equipped to translate raw data and information into stunning visualizations that can transform IAH Airport into an innovative and memorable experience.

## About the Artists



Input Output is a creative duo comprised of Billy Baccam and Alex Ramos. They bring inanimate structures and spaces to life by combining art, science, technology, and architecture with the creative implementation of light and sound. Each brings innovative approaches along with unique human experiences that shape their artistic process. Born out of a collaboration that lit up the inaugural Illectric River Festival in 2017, Input Output has sought

to make their mark on Houston, partnering with local artists, institutions, and events such as Dream Machine, The Health Museum, Art Car Ball, Nuit Blanche, and HUE Mural Festival among many others to provide unique and novel experiences for people to enjoy.

Billy Baccam, a native of Dallas, Texas, studied fashion design and electrical engineering in Texas before moving to New York to join an entrepreneurial program with a budding tech startup as chief technology officer. Once back in Houston, Billy was invigorated to merge his passion and skills of art and technology through creative coding. Alex Ramos, a Mexican-born artist, studied at The University of Houston and the Art Institute of Houston and is a veteran of the Iraq and Afghan wars. He previously worked at Apple, taught computer science at the WIDE School, and is currently the Museum Public Programs & Education Curator at Seismique. Alex was seeking ways to integrate art with technology as well, learning various programs to be able to manipulate color and light in a style all his own. Together, Billy and Alex formed Input Output to research, design, and develop interactive, digital-physical experiences utilizing new media art and technology.