## **APPLICATION**

## A. Abstract:

"Oceanus," a sculptural installation, represents the earth's waterways and proximate animal populations using scientifically gathered data. Water-jet-cut aluminum forms sculptural drawings that become a floating filigree of interconnected arteries representing waterways and 3D Printed forms represent animal populations rising off of the surface like particles in space. By eliminating the earth's landmass from the representation, it will correspondingly efface political boundaries in order to reframe the spectator's understanding of the critical role water plays in supporting terrestrial animal life. Funds will cover the water-jet cutting of aluminum, 3D printing materials and supporting apparatus for this work.

## B. Proposal:

"Oceanus" draws from and extends my existing oeuvre, which places art at the intersection between science and technology. Specifically, I create artworks that utilize scientific methods and digital technologies in order to explore the impact of technology on human decisions that are reshaping ecology, climate and community. The aim of my research is to draw spectators into interactive art-installations that promote awareness of sociotechnological environments, while emphasizing human responsibility inside them.

Highly original both in interdisciplinary methodology and cutting-edge technique, "Oceanus" spans the breadth of scientific, technical, and social inquiry and continues to place my research in the forefront in the field of Electronic Arts. In the vein of true inquiry, this work will be rationally descriptive but will not be a specific narrative. This work queries the intersection of human life with local and global ecologies. Unlike traditional art forms, this work will be 3D visualized and modeled, translated into physical space, and rendered in water-jet cut aluminum and 3D printed resin, using tools that offer new ways to "draw" sculpturally.

Eventually traversing the entire globe, the project began with data collected from geographical points in the United States. Matching GPS coordinates with USGS data for animal (including human) populations, the resulting sculptural installation will represent earth's waterways and proximate animal populations. By eliminating the earth's landmass from the representation, it will correspondingly efface political boundaries in order to reframe the spectator's understanding of the critical role water plays in supporting terrestrial animal life.

For practical reasons, the work will only show parts of the earth's water at any given time. The entirety of the earth's waterways can be mapped along X and Y axes (including the Z axis of altitude) and unfolded along Cartesian coordinates. The project necessarily begins with Florida. The Hillsborough River is currently being fabricated, and the funds from this grant will water-jet cut the Withlacooche River just north of the Hillsborough River.

When placed parallel to the ground, these 3-D drawings of waterways will appear like aerial maps traversing Euclidian pathways; grids with tendrils that seemingly go through the edges of the space will reveal the waterways' massive reach. The animal populations will float, suspended like galaxies. The spectator will be positioned inside of this.

With "Oceanus," I make it possible for the viewer to experience the totality of the earth's waterways in a single space. The viewer will be able to contemplate the intricacies of global water systems as an immense force that has shaped the planet, its ecology, and the migrations of various land-based populations. (423 words)