THE ROANOKE TIMES

Arts & Extras: Data-driven art

by Mike Allen

"Surge" by Daniel Canogar is made of sculptural LED screens installed in the Moss Arts Center's grand lobby. The commissioned display will be up for two years and uses Blacksburg's wind, temperature, air pressure and humidity digital data to generate flowing streams of color.

MATT GENTRY | The Roanoke Times

Daniel Canogar turns data streams into visual art.

"What could be more intangible and immaterial than data?" he said. "It's something that we're so surrounded by. It's actually affecting us in so many ways on a daily basis and we don't really even see it or notice it."

One of his works, "Xylem," projected on a wall in the Moss Arts Center, presents the world's daily economic data as a vertical cascades of numerals not unlike the representations of cyberspace seen in the 1999 blockbuster "The Matrix." Occasionally the streams freeze, revealing the precise numbers and the names of the financial indexes. Another piece, called "Ripple," opens new CNN videos as they're posted online and uses them to create a colorful, mesmerizing, fluid abstraction.

Canogar, whose animated installations have turned heads in the European Union Council building in Belgium and the Tampa International Airport in Florida, is one of three artists contributing to "DATAFORM," an exhibition of digital art that opened Thursday in all three of the center's galleries.

"I'm always looking at ways to try and show technology here," said Margo Crutchfield, the center's curator at large.

In the gallery guide to the exhibition, Crutchfield saidwrote, "All three artists in this exhibition—Yorgo Alexopoulos, Jim Campbell, and Daniel Canogar—address concepts and ideas that we generally can't see, fully grasp, or even comprehend, given the prodigious amount of information that they draw from, whether that be from the profusion of data in our world, the vastness of nature, or the complexities of human perception. Their poetic transformations of data into mesmerizing visual forms explore new directions in apprehending the world around us."

In addition to his contributions to "DATAFORM," Canogar has created a new work, "Surge," for the

center's grand lobby. Shaped to look like an immense ribbon that winds in and out of the wall before finally disappearing into the ceiling, "Surge" is actually a series of flexible LED screens mounted in sculpted grids. Algorithms will convert streams of Blacksburg weather data into literal streams of color that constantly flow along the "ribbon," contributing to the illusion that the screens are a single object.

"I'm trying to show datae surging through this space," Canogar said. The color streams draw the eye to the lobby's main staircase. "It's almost like inviting people to go up and explore."

"Surge" will stay on display in the center lobby for two years, and every six months the data set that animates it will be changed.

Earlier technological revolutions — for example, the advent of the railroad and the rise of factories — were easy for the senses to grasp, Canogar said. He sees the Moss Art Center's "DATAFORM" exhibition as a way to grant physical representation to data. "I think that it helps us by giving form to data, helping us start having a relationship with it that is beyond something that's completely abstract."

Another of his works in the show, called "Echo," consists of four bowed and twisted screens with colored surfaces that grow more agitated based on the activities they monitor, such as rainfall or forest fires. A couple of the screens contort to face away from the viewer in what Canogar conceives as an act of rebellion against their human masters.

Canogar, 54, didn't start his artistic career with high tech ambitions in mind. A native of Madrid, he originally pursued photography, spending significant time in the darkroom as he earned his master's degree in New York. "I'm making an art piece out of my old darkroom equipment," he said.

His interest in art derived from data feeds grew from his experiences during a 2012 art residency in Silicon Valley, in which he attempted to create an artwork in collaboration with tech companies but was rebuffed. Once he returned to Madrid, "I felt like I needed to give this data world another stab," despite the frustration of his first attempts. "It is something that as an artist we need to address. It is something that we need to represent."

Alexopoulos, who divides his time between Los Angeles and New York, contributes "Conjugated Gradients: Split," which blends colors, geometric forms, and vistas from land, sea and sky.

Considered a pioneer in digital art, Chicago-based Campbell contributes several works that present variations on his signature motif, which involves reducing video footage to extremely low resolution and projecting or displaying the moving images using LED lights. Up close, the works appear blurred and abstract, but from a distance the viewer can discern people in motion.

"We're hard-wired for recognizing faces and figures," Campbell told The Roanoke Times in 2010.