• Paper / Proposal Title:
Interactive light art and shifting relationships among individuals, the collective, and cities

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• Abstract (300 words):
Recent innovations in lighting technology, coupled with advancement in data processing, have given rise to architectural scale light art that alter ways in which information is visualized and communicated. These light installations, often at a scale of buildings or even infrastructures, process data ranging from personal narratives, images from facial recognition systems, to heartbeats and project them in forms of light on surfaces of building and landscapes. Unlike the earlier digital work of Jenny Holzer or Nam Joon Paik, these works are participatory and interactive in real-time. In the public art installation Pulse Park (2008) by Rafael Lozano-Hemmer in Madison Square Park, the park visitors hold the sculpture’s metal handles which measure their heart rates. The visualization of the pulses is successively projected in block-scale light patterns across the lawn in narrow, pulsing beams. Art works like this alter privacy and publicity of information sharing in ways of the information age; they take intimate information, often abstracted, and construct a public digital display, connecting individuals to the mass.
Computation also enables an individual artist to control a public artwork of a massive scale from a personal device. This phenomenon is evidenced in the photograph of the artist Leo Villarreal solitarily controlling the LEDs of his *The Bay Light* (2013), a 1.8-mile-long artwork on the San Francisco Bay Bridge, from his laptop. This represents a shift from the previous generation of Light and Space art, or building-scale public art by Christo or Anish Kapoor. Due of its scale and location, *The Bay Light* was seen by an unparalleled number of people and generated significant impact in the region. How have recent technology enabled new collective experience through art that publicly and spatially visualizes data? The paper examines how these artworks shift relationships between the individuals and collective, and between people and cities.

• Author(s) Biography (200 words each):

**Aki Ishida** is Associate Professor of Architecture at Virginia Tech and a licensed Architect. She is also a Senior Fellow of Virginia Tech’s Institute for Creativity, Arts and the Director of Intelligent Infrastructure for Human-Centered Communities, the university’s trans-college initiative that fosters transdisciplinary research and curriculum. She founded Aki Ishida Architect PLLC in New York City, and prior to that, she worked at the offices of Rafael Vinoly Architects, James Carpenter Design Associates, and I.M. Pei Architect.

Aki’s work examines architectural materials in broader cultural and social contexts. She is the author of the book *Blurred Transparencies in Contemporary Glass Architecture: Material, Culture, and Technology* (Routledge, 2020). Her design work is a synthesis of spatial uses of light and her interest in public engagement through built environments. Aki’s research has been supported by The Japan Foundation, Columbia University, The American Institute of Architects NY, The MacDowell Colony, and the Baer Art Center. She has served three times as a panelist for the National Endowment for the Arts grants. She has been recognized with a 2017 Association of Collegiate Schools of Architecture New Faculty Teaching Award and as one of 25 Most Admired Educators for 2016 by DesignIntelligence.