

City of Philadelphia  
**MuralArtsProgram**

**LIGHT DRIFT**

INTERACTIVE RFID LIGHTING INSTALLATION

ARTIST: J. MEEJIN YOON

**LIGHT DRIFT**, a collaboration between the City of Philadelphia Mural Arts Program and artist J. Meejin Yoon, placed a temporary interactive lighting installation along Schuylkill Banks between Market and Chestnut Streets from October 15-17, 2010. The project created a field of lighting elements that drew viewers into a playful engagement with the artwork, the river, and each other.

The lighting elements are shaped like orbs or buoys and are equipped with electronics that allow them to respond to a viewer and to communicate with each other. The orbs on land use sensors to detect the presence of a person and relay a radio signal to the corresponding orbs in the water, allowing visitors to transform the lighting behavior and color of the orbs in the river. As viewers engage and occupy the orbs along the park, the grid of lights in the water becomes an index of the activities on land. Multiple viewers can create intersections of linear patterns, encouraging viewers to “play” with each other. These orbs bring the community together by providing gathering spaces for watching the river turn into a flickering constellation, creating new connections on the river’s edge.

Light Drift creates an atmosphere, a field of lights that transform in color and intensity based on the public’s interaction with it. The resting state of the field is a constant state of green. When a visitor approaches a land orb, the orb starts an “enticement mode” by pulsing between blue and green. If a visitor sits on the orb, the pulsing will transition to a blue state. The water orbs that align with the land orb will change colors at the same time, creating a linear extension of blue lights in the water. Because the orbs are arranged on a diagonal grid, the lines of lit orbs will form a series of intersecting lines in the field. The intersection of lines of lit orbs in the water will encourage different people interacting with the orbs to also interact with each other.

The individual elements are vacuum formed translucent shells molded from PETG (Polyethylene Terephthalate Glycol). PETG is a non-toxic and fully recyclable material that is milky in color, easy to mold, and acts as a diffusing element for the lighting inside. The electronics consist of custom micro controllers and RFID (radio frequency identification) transmitters, allowing each orb in the field to be addressable, and specifically controlled by transmitters on the land. LED (Light Emitting Diode) lighting allows the orbs to glow and change colors. LED lighting is one of the most energy efficient means of lighting.

Light Drift was de-installed on Monday, October 18, 2010 and may be reinstalled in 2011 in Boston along the Charles River. When the project is finished, the PETG materials will be recycled.

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## **J. MEEJIN YOON**

J. Meejin Yoon is an installation artist, designer and architect. She is an Associate Professor in the Department of Architecture at the Massachusetts Institute of Technology and founder of MY Studio in 2001 and Howeler + Yoon Architecture in 2005. Yoon received a Bachelor of Architecture from Cornell University with the AIA Henry Adams Medal (1995), a Masters of Architecture in Urban Design with Distinction from Harvard University (1997), and a Fulbright Fellowship (1998). Other projects include White Noise White Light, commissioned for the Athens 2004 Olympics, and Low Rez Hi Fi, a permanent interactive installation in Washington DC. Yoon has received numerous awards including the Rome Prize, the RISD Athena Award, and the United States Artist Award.

## **CITY OF PHILADLEPHIA MURAL ARTS PROGRAM**

The Mural Arts Program is the nation's largest mural program. Since 1984, the Mural Arts Program has created over 3,000 murals and works of public art, earning Philadelphia international recognition as the "City of Murals." The Mural Arts Program engages over 100 communities each year in the transformation of neighborhoods through the mural-making process, while award-winning, free art education programs serve nearly 2,000 youth at sites throughout the city and at-risk teens through education outreach programs. The Mural Arts Program also serves adult offenders in local prisons and rehabilitation centers, using the restorative power of art to break the cycle of crime and violence in our communities. Each year, nearly 10,000 residents and visitors tour the Mural Arts Program's outdoor art gallery, which has become part of Philadelphia's civic landscape and a source of pride and inspiration.

## **PROJECT TEAM**

MY Studio Project Team: J. Meejin Yoon, Eric Höweler, Ryan Murphy, Parker Lee, Xi Liu, Chris Carper, Jennifer Chuong, Lauren McClellan, Man Yan Lam, Yushiro Okamoto, Kris Swick, Dan Sullivan, Jeremy Jih, David Costanza

MY Studio Electronics Engineer: Mark Feldmeier

Philadelphia Mural Arts Program Project Manager: Judy Hellman

Philadelphia Water Department: Jim D'Agostino, Shauna O'Donnell

Volunteers: Ray Mclane, Jeremy Voorhees, Erin Keith, Beth Emig, Todd Womelsdorf, Becky Shoemaker, Steve Thomas, Elizabeth Thomas, Han Salzmann, Sarah Salem, Danielle Gray, Jim Conners, Marie Kyle, John Zox, Ashley Drevnak, Sierra Buck, Hae Young Chang, Gosia Gruszka, Antwon Kyle, Dimitar Pouchnikov, Erik Maso, Ringo Tse, Xiao Lin, Jonathan Carpinteyro, Jake Kenney

## **SPECIAL THANKS**

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