

BAM 2019 Winter/Spring Season

Teknopolis™, BAM's interactive digital arts showcase returns for its third year, offering the latest in technology-fueled arts, Feb 23—Mar 10

This year's lineup to feature virtual reality storytelling, augmented reality, and 360° films by leading artists and technologists, including Zach Lieberman, Molmol Kuo, Gilles Jobin, Cabbibo, and Daily tous les jours

National Grid is the Lead Sponsor of Teknopolis™

Teknopolis™ 2019

BAM Fisher (321 Ashland Pl)

Sat, Feb 23 & Sun, Feb 24; Thu, Feb 28—Sun, Mar 3; Thu, Mar 7—Sun, Mar 10

Teknopolis™ \$16 for children (Ages 6—14) and \$21 for adults;

Teknopolis™ + VR \$35 for youth (Ages 9—14) and \$45 for adults

Brooklyn, NY/January 11, 2019—Brooklyn Academy of Music's (BAM) popular, interactive digital arts showcase *Teknopolis™* returns for its third year with an ambitious new program designed to inspire creativity, connect with the future, and embolden a renewed sense of play for all ages. This year's highlights offer the latest in technology-fueled art and participatory environments, featuring work by leading artists and technologists, including Zach Lieberman, Molmol Kuo, Gilles Jobin, Cabbibo, and Daily tous les jours.

The three-week-long digital arts playground will offer two different experiences: *Teknopolis™* and *Teknopolis™* + VR, allowing visitors to choose according to digital features and age-appropriate elements. The *Teknopolis™* experience allows access to an array of installations that make up the digital arts playground geared for ages 6+ on the main and lower levels of the BAM Fisher building. The selected installations allow visitors to use creative technology to explore drawing, dance, storytelling, and music-making, in timed-entry sessions.

The 90-minute experience commences in the Fishman Space with six motion-based and touch-based installations curated by Brooklyn artists **Molmol Kuo** and **Zach Lieberman**, co-founder of the creative software openFrameworks, and other collaborators. The duo's popular *Más Que la Cara* utilizes face tracking and animated graphics to augment the user's facial expressions, creating a living mask that reacts to head and facial movements. The balcony of the Fishman Space will feature **TMEMA's** *Manual Input Sessions*, which turns traditional hand shadow play into an audiovisual shadow concert.

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The Fisher Lower Lobby will feature two installations: a music-based installation from Belgium and an interactive installation from Montreal. *Geometric Music*, a collaboration by award-winning digital creative agency **Dogstudio** and innovative design agency **Superbe**, will allow users to create looped rhythms by manipulating and changing the direction, speed, and tone of a live recording of sounds made by participants. *McLarena* by **Daily tous les jours**, invites visitors to recreate the magic of the 1964 animated live action short *Canon*, as participants take part in a collaborative dance inspired by the film.

New this year, the Teknopolis™ + VR experience allows visitors full access to the digital arts showcase throughout the entire BAM facility in two-hour timed-entry sessions. In addition to the main and lower-lobby level installations, Teknopolis™ + VR participants will have exclusive access to try a selection of immersive VR and 360° films in small groups—open to ages 9+—located on the upper levels of the BAM Fisher.

The Hillman Studio will house interactive VR experiences, including *VR_I*, the first ever immersive contemporary dance piece, choreographed by **Gilles Jobin**, that enables users to inhabit full-body avatars that interact and communicate physically with each other in various performance landscapes, and **Cabbibo**'s *L U N E*, an experimental haiku dedicated to the exploration of VR where users can dance, play, meditate, or build a pillow fort made from stars.

The enclosed Fisher Rooftop will host a showcase area dedicated to 360° films placing users in the middle of the action. This year's 360° films include *Crow: The Legend*, fully immersive, award-winning animated short, by **Baobab Studios** and featuring Oprah Winfrey, John Legend and Constance Wu and *Sonaria*, presented by the Emmy Award-winning platform **Google Spotlight Stories**, brings visitors on a vivid journey of sound and light as the ever-changing lead creatures flow from one life-form to another. The Fisher Rooftop will also house the ARcade where you can play with augmented reality apps including FLARMINGOS, in a digital dance of ecological awareness wherein users create and populate a virtual habitat with life-size dancing flamingos.

Named for the Greek words *Tekne* (craft or art) and *Polis* (ideal city)—*Teknopolis* is curated by **Steven McIntosh**, Director of Education & Family Programs at BAM. "We are thrilled to work with some of the most influential artists, in the world, to present groundbreaking interactive and immersive experiences at BAM. *Teknopolis* provides an important platform for artists and technologists to share their work with those who dare to be adventurous," said McIntosh. "This year's presentation will feature a collection of inspiring, new installations created by renowned digital artists Zach Lieberman and Molmol Kuo and the boundary-breaking VR contemporary dance experience *VR_I* by 2014 Next Wave Festival artist Gilles Jobin, making its NYC debut after stops at major film and dance festivals around the world. Whether it's creating unique synth-rhythms, lending your moves to community-generated choreography, or playing sci-fi VR instruments, there's something at *Teknopolis* that can turn your curiosity into creativity."

Tickets for Teknopolis™ and Teknopolis™ + VR are on sale now.

Teknopolis™ tickets are \$16 for children (Ages 6—14) and \$21 for adults.

Teknopolis™ + VR tickets are \$35 for youth (Ages 9—14) and \$45 for adults.

Each person must have a ticket to be admitted, regardless of age. Children under age 12 must be accompanied by an adult. For more information call 718.636.4100 or visit BAM.org/kids.

For press information on Teknopolis™ please contact Cynthia Tate at 718.724.8022 or ctate@BAM.org

About the Installations

Teknopolis™

Body Sketches

By Molmol Kuo and Zach Lieberman
Fishman Space

Body Sketches extends the user's body, creating a series of dynamic costumes they can perform in, using body movement. Three projections present a wide range of forms transforming movement through geometric and physical augmentation. Participants will be invited to hand-draw patterns, which will be used in the costume as a form of digital textile. The costumes will come to life on the screen as users wear and manipulate them.

World Premiere

Zach Lieberman and Molmol Kuo are Brooklyn-based artists, researchers and educators that use technology to create moments of wonder. They develop installations, performances, videos, and experiments that augment and extend the body and explore the poetics of space.

Lieberman creates performances and installations that take human gestures as input and amplifies them in different ways—making drawings come to life, imagining what the voice might look like if we could see it, and transforming people's silhouettes into music. Some accomplishments and honors include *Fast Company's* Most Creative People, the Golden Nica from Ars Electronica, Interactive Design of the Year from Design Museum London, and *Time Magazine's* Best Inventions of the Year. A co-creator of openFrameworks, an open source C++ toolkit for creative coding, Lieberman creates artwork through writing software. He is a co-founder of the School for Poetic Computation an experimental school exploring the creative possibilities of using code and electronics to make art.

Kuo builds unique devices for unique problems; creating new tools for creative expressions and to reimagine our presence in society. Her tools help tell stories about people, cities, and sometimes objects. Kuo is an artist-in-residence at Google Art and Culture Institute and formerly Adobe (2017 November to March 2018), working primarily on creative applications around Augmented Reality. She is a Media Arts Fellow at BRIC where she produces content for the Brooklyn Free Speech program. When she is not in front of a computer or a soldering station, she volunteers for the Sanctuary for Families in New York to advocate for victims of violence and sex trafficking, and she works with survivors of gender-based violence to rebuild their lives beyond trauma. Her art and work has been featured on National Geographic's *Tech + Art: Obscuring Reality*, Vice Media's *The Creators Project*, TED Talk, and Brooklyn Free Speech.

Reflection Studies

By Zach Lieberman
Fishman Space

Reflection Studies is an interactive artwork based on a series of software explorations of how light reflects and how visitors can paint with light using techniques such as refraction and caustics. The installation features a special light table created to allow for interaction, exploration, and creation with light and shadow. Users are able to creatively manipulate the projected visuals using shapes, letters, and their hands.

Re-coded

By Zach Lieberman and the School for Poetic Computation
Fishman Space

Re-coded pays homage to innovators whose work exists in the space between art and technology. Celebrating these pioneers, this installation presents reinterpreted works alongside the code that drives them. In real time, viewers can see the artwork change and also see the code causing the changes. The sketches in the project are inspired by works from Muriel Cooper, Vera Molnar, John and James Whitney, Rosa Menkman, Bridget Riley and more.

Drawn

By Zach Lieberman
Fishman Space

Drawn presents a whimsical scenario in which painted ink-forms appear to come to life, rising off the page and interacting with the hands that drew them. Visitors are invited to become performers as they mark, nudge, jot, dot, and poke the ink across the paper. The work extends the user's performance with a simple, intuitive interface, allowing for easy operation, and a rear projection screen creating both a private space for performers to work in and public space for observers.

Más Que la Cara

By Zach Lieberman and Molmol Kuo
Fishman Space

Más Que la Cara (More Than the Face) is an augmented mirror that recognizes facial elements such as lips, eyes, and nose and interacts with the movements and expressions of the user. The installation explores what the intersection of masks, technology, and public play might look like. The key objective is to create an intuitive, engaging experience for kids and adults, and explore the idea of the augmented face. *Más Que la Cara* explores what kinds of geometry can be connected to faces and, in particular, how different facial movements and expressions can drive them.

New York Premiere

Weird Cuts

By Zach Lieberman and Molmol Kuo
Fishman Space

Weird Cuts invites users to make collages in AR space using photography. The app consists of two modes, cutout and collage. In cutout mode users collect a wide range of materials via photographs which are cut into shapes. In collage mode users assemble and arrange their cutouts in 3D space by moving and tapping the screen. The output is a multi-dimensional work made from combinations of found objects and spatial improvisation.

New York Premiere

Manual Input Sessions

TMEMA (Golan Levin and Zach Lieberman)
Fishman Space, Balcony

Manual Input Sessions is a series of audiovisual vignettes which probe the expressive possibilities of hand gestures and finger movements. The "concert" is performed on a combination of custom interactive software, analog overhead projectors, and digital computer video projectors. The analog and digital projectors are aligned such that their projections overlap, resulting in an unusual quality of hybridized, dynamic light.

TMEMA is the collaborative team of Golan Levin and Zach Lieberman. Founded in 2002, TMEMA develops interactive performances, museum installations, web-based information

visualizations, reactive commercial environments, and experimental software systems that meld high-end computation to deeply-rooted sensibilities in human-centered arts and design.

Geometric Music

By Dogstudio and Superbe
Fisher Lower Lobby

Geometric Music is an interactive installation that allows users to create non-stop collaborative music. Geometry is used to edit and craft a colorful masterpiece based on personal sounds. Users will record a sound, organize the rhythm with the sound, and link it to one of the available shapes—circle, triangle, square, and hexagon. All four shapes are synchronized together to produce an experimental rhythmic masterpiece. Be the music.

New York Premiere

McLarena

By Daily tous les jours
Fisher Lower Lobby

McLarena is a large-scale interactive installation that allows visitors to collectively reproduce choreography from the classic animated film *Canon* by renowned filmmaker Norman McLaren. Visitors are invited to step into a recording booth, and join the collaborative imitation game. Their choreography is then projected onto the lobby wall. Seating is provided to create an impromptu theater to watch the communally created spectacle. The installation explores the principle of a “canon,” a musical or dance technique where performers reproduce in regular intervals parts of a song or choreography. *McLarena* was first commissioned in 2014 by the Quartier des Spectacles and the National Film Board of Canada for the McLaren Wall-to-Wall tribute in Montreal, celebrating the 100th anniversary of Norman McLaren’s birth.

New York Premiere

Based in Montreal, Daily tous les jours is an interaction design and art studio, creating large-scale collective experiences in public spaces since 2010.

Teknopolis™ + VR

Interactive Virtual Reality Installations

Hillman Studio

Audio Forager

By Cabbibo

Imagine creating a drum kit by pulling random audio files from cyberspace. Visitors are invited to feel the magic of learning in Cabbibo’s new experiment that combines over 44,000 sounds from Freesound.org, a data set created by media artist Kyle McDonald. Users can create their own piano out of synth notes, run their hands through a cloud of sound, learn the shape of a computer’s mind, select their favorite audio delicacies and make a drum set from a decadent aural smorgasbord.

New York Premiere

Cabbibo (Isaac Cohen) is a triptastic, experimental audio/visual adventurer. Using the moniker “Cabbibo,” an homage to the late physicist Nicola Cabibbo, he has published an eclectic array of works ranging from audiovisual fact-learning apps, interactive experiences made from recursive algorithms, to a real-time procedural music blogs where users traverse a universe of sound. In addition to creating a plethora of experiences, Cabbibo is also responsible for a number of open source tools to help others create stunning real-time graphics.

L U N E

By Cabbibo

Music by JJ Verne

L U N E is an experiential haiku dedicated to the exploration of the medium of VR. Users can touch and play; poke and prod; dance, move, caress, or simply meditate as they build a pillow fort made from the stars, in the company of the quiet moon.

Play Room

By Cabbibo

Play Room is an audiovisual experiment in reactivity and interactivity. Users will play a musical instrument that could only exist in the world of VR, creating a space that is as responsive as it is colorful.

New York Premiere

VR_I

By Cie Gilles Jobin and Artanim

VR_I is an immersive, contemporary dance experience that plays with the perceptions of identity, space, and scale. Choreographed by Gilles Jobin, this installation combines dance with cutting-edge VR technology that allows five spectators to inhabit full-body avatars. The users interact with each other and engage a troupe of giant, and tiny, dancers in various landscapes. The award-winning VR experience enters unexplored and uncharted territories. *VR_I* is a collaboration with Caecilia Charbonnier (Sundance Film Festival New Frontier) and Sylvain Chagué (Artanim's *Real Virtuality: Immersive Explorers* 2016) and has been traveling the globe as an official selection for dance, film and digital art festivals, including the Sundance Film Festival, the Venice Film Festival and Lyon Dance Biennale.

New York Premiere

Gilles Jobin is a Swiss choreographer based in Geneva. Since 1995 he has produced over 20 full-length works presented internationally, including *QUANTUM* (BAM's 2014 Next Wave Festival). He directed the 3D film *WOMB* (2016) and his more recent projects focus on the creation of content for virtual reality.

360° Film Lounge

Fisher Rooftop

Sonaria

Directed by Scot Stafford and Chromosphere

Produced by Google Spotlight Stories

Sonaria follows two ever-changing creatures as they flow from one life-form to another on a vivid journey of sound and light. *Sonaria's* visual language is simple and abstract, designed to suggest, while the sonic language is layered and immersive, designed to answer. *Sonaria* is directed by Scot Stafford and Chromosphere.

Google Spotlight Stories means storytelling for VR, created by artists and technologists making immersive stories for mobile 360, mobile VR and room-scale VR headsets, and building the innovative tech that makes it possible.

Sanctuaries of Silence

Directed and Produced by Adam Loftin and Emmanuel Vaughan-Lee

Silence might be on the verge of extinction and acoustic ecologist Gordon Hempton believes that even the most remote corners of the globe are impacted by noise pollution. In *Sanctuaries of Silence* viewers will join Hempton on an immersive listening journey into Olympic National

Park, one of the quietest places in North America. *Sanctuaries of Silence* celebrates the beauty of nature, from birds of the air to the whales of the deep sea and everything in between.

Look but with Love: A Story of Dance

Directed by Sharmeen Obaid-Chinoy

Produced by SOC Films and Here Be Dragons

Viewers will experience the richness of Pakistani song and dance alongside dancer Beena Jawad, who passes the tradition of dance on to children living in the city of Lahore. A Within original series, *Look but with Love* is directed by two-time Academy Award-winning documentarian Sharmeen Obaid-Chinoy and produced by SOC Films and Here Be Dragons.

Look but with Love: A Story of Music

Directed by Sharmeen Obaid-Chinoy

Produced by SOC Films and Here Be Dragons

Look but with Love: A Story of Music transports viewers to Pakistan's land of Sindh as Saif, a musician, tries to preserve the melodies of his forefathers. Viewers will experience the music and poetry of the historical province. A Within original series, *Look but with Love* is directed by two-time Academy Award-winning documentarian Sharmeen Obaid-Chinoy and produced by SOC Films and Here Be Dragons.

Crow: The Legend

Directed by Eric Darnell

Produced by Baobab Studios

From the director of *Madagascar, Invasion!* (Tribeca 2016) and *Asteroids!* (Teknopolis 2018) comes Baobab Studios' latest visionary VR animation. *Crow: The Legend*, is a fully immersive and interactive journey exploring themes of sacrifice, community, and diversity wherein the viewer plays a key role in the story affecting the world and characters around them. The award-winning animated-short film contains a diverse all-star cast of voice talent including: John Legend as Crow, Oprah Winfrey in her VR debut, Constance Wu (*Crazy Rich Asians*), Diego Luna (*Narcos: Mexico*), Tye Sheridan (*Ready Player One*), and Liza Koshy (*Liza on Demand*).

A Classic Circus Folds Its Tent

By Benjamin Norman, Lizette Alvarez, Logan Jaffe and Kaitlyn Mullin

The New York Times

A virtual reality experience from *The New York Times* that takes viewers backstage for the final performances from the world's most historic circus, the Ringling Brothers and Barnum & Bailey circus. Fly on the trapeze and meet the show's ringmaster of 18 years as he reflects on what he'll miss most.

Man on Spire

Directed by Jimmy Chin and Ben C. Solomon

The New York Times

Climb to the top of 1 World Trade Center with the professional mountaineer and photographer Jimmy Chin as he travels to death-defying heights in order to strap a 360° camera setup to the 408-foot-tall spire on top of the skyscraper. The visceral experience climaxes with a stunning time lapse of NYC's expansive landscape. *Man on Spire* is a collaboration with *The New York Times* and Koncept VR.

Augmented Reality ARcade
Fisher Rooftop

FLARMINGOS

By Kristin Lucas

FLARMINGOS is an augmented reality experience, which promotes ecological awareness, wherein users can create a virtual habitat and populate it with life-size dancing flamingos. The flamingos are animated by human motion capture and a dynamic flocking algorithm that influences their collective behavior. This experience is produced through the Tech Residency at Pioneer Works in Red Hook, Brooklyn, and made in partnership with Tour du Valat, a research institute in Arles, France.

Artist and director Kristin Lucas plumbs the storytelling capacity of emerging technologies and innovates playful new modes of experimentation that create pathways to agency, introducing alternatives to dire thoughts about human activity. Lucas is the recipient of numerous grants and residencies, including an Engadget Alternate Realities grant and a BAU Institute arts residency. Her work is represented by And/Or Gallery in Los Angeles, Postmasters, and Electronic Arts Intermix in New York. She holds degrees from The Cooper Union and Stanford University and teaches in the art department at the University of Texas at Austin.

Weird Type

By Zach Lieberman and Molmol Kuo

Have you ever wanted to draw with words? *Weird Type* is an AR app that lets you paint with text in space. You can type your own phrases and pick from multiple modes to see your text in completely new ways.

Credits

National Grid is the Lead Sponsor of *Teknopolis™*

Your tax dollars make BAM programs possible through funding from the City of New York Department of Cultural Affairs and the New York State Council on the Arts with the support of Governor Andrew M. Cuomo and the New York State Legislature. The BAM facilities are owned by the City of New York and benefit from public funds provided through the New York City Department of Cultural Affairs with support from Mayor Bill de Blasio; Cultural Affairs Commissioner Tom Finkelpearl; the New York City Council including Council Speaker Corey Johnson, Finance Committee Chair Daniel Dromm, Cultural Affairs Committee Chair Jimmy Van Bramer, Council Member Laurie A. Cumbo, and the Brooklyn Delegation of the Council; and Brooklyn Borough President Eric L. Adams. BAM would like to thank the Brooklyn Delegations of the New York State Assembly, Joseph R. Lentol, Delegation Leader; and New York Senate, Senator Velmanette Montgomery.

General Information

BAM Howard Gilman Opera House, BAM Rose Cinemas, and BAMcafé are located in the Peter Jay Sharp building at 30 Lafayette Avenue (between St Felix Street and Ashland Place) in the Fort Greene neighborhood of Brooklyn. BAM Harvey Theater is located two blocks from the main building at 651 Fulton Street (between Ashland and Rockwell Places). Both locations house Greenlight Bookstore at BAM kiosks. BAM Fisher, located at 321 Ashland Place, is the newest addition to the BAM campus and houses the Judith and Alan Fishman Space and Rita K. Hillman Studio. BAM Rose Cinemas is Brooklyn's only movie house dedicated to first-run independent and foreign film and repertory programming. BAMcafé, operated by Great Performances, offers varied light fare and bar service prior to BAM Howard Gilman Opera House evening performances.

Subway: 2, 3, 4, 5, Q, B to Atlantic Avenue – Barclays Center (2, 3, 4, 5 to Nevins St for Harvey Theater) D, N, R to Pacific Street; G to Fulton Street; C to Lafayette Avenue

Train: Long Island Railroad to Atlantic Terminal – Barclays Center
Bus: B25, B26, B41, B45, B52, B63, B67 all stop within three blocks of BAM

For ticket information, call BAM Ticket Services at 718.636.4100, or visit BAM.org.

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