

OLIVIA JACK

computer programmer and media artist

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SELECTED PROJECTS

Hydra. *net.art + software*. 2018.

Browser-based platform for live coding visuals, inspired by analog video synthesis. Ongoing investigation into the aesthetics of distributed networks, feedback, collaboration, and chaos in live performance.

<https://hydra-editor-v1.glitch.me/>

Bogotá: Los Cerros Desde el Aire. *Media Installation*. Commissioned by Museo de Bogotá. Bogotá, Colombia. 2017.

Visual and auditory cartography of the formation of the city of Bogotá over time, from pangea to the present day. Generative animations based on cartographic analysis and custom software.

Live Lab. *software*. Commissioned by CultureHub Art + Technology Center in NYC and Seoul Institute of the Arts in Seoul, Korea. 2015 - 2018. Open-source, Browser-based software for networked performance that uses a peer-to-peer mesh network to share audio, video, and data streams between performers and venues.

PIXELSYNTH. *net.art*. 2016.

Browser-based synthesizer for creating sound from images and drawings, allowing performers to use visual parameters and illustration to create a live sound composition. Inspired by the ANS synthesizer created by Evgeny Murzin in 1937. <https://ojack.github.io/PIXELSYNTH/>

NODOS: cuerpos en expansión. *Dance + technology performance*. Dir. Edna Orozco. Bogotá, Colombia. 2015.

Exploration of the body as a series of tracings, nodes that expand, contract, split and merge with other bodies. Uses infrared sensors and custom software to generate real-time interactive projections.

Maps for getting lost. *Net.art, cartography*. 2015.

Generative and self-destructive street maps drawn into the browser. Algorithmic exploration of the city as an ever-evolving series of ephemeral connections.

QUIA: the same other as always. *Dance + technology performance*. Dir. Edna Orozco. Bogotá, Colombia, 2014 - 2016. Interactive set design and software development for the experimental dance performance QUIA, which has been performed in Colombia, Croatia, and Costa Rica.

Laboratory of Possibilities. *Media Installation*. Oakland Museum of California, Oakland, CA. 2014.

Creation of a participatory media installation exploring dystopian and utopian futures through collaborative storytelling and illustration. Permanent installation in the Natural Sciences Gallery of the Oakland Museum of California.

Anti-Eviction Mapping Project. *San Francisco, California, USA*. 2013 - 2016.

Co-founded independent collective documenting gentrification and displacement in the San Francisco Bay Area, using data visualization and cartography to show the impact of house policy on local communities.

Migration Patterns, *Media Installation*. Oakland Museum of California, Oakland, CA. 2012.

Visualization of movement over time and cyclic migration of animals in the Pacific Ocean, using databases of scientific research and tracking. Permanent installation in the Natural Sciences Gallery of the Oakland Museum of California.

EXHIBITIONS

- 2018 *Domólicas*, ARTBO: Bogotá International Art Fair, Bogotá, Colombia.
- 2016 *Queer Porto*, Maus Hábitos, Porto, Portugal
- 2016 *Interactivos?16: Mundos Posibles*. Medialab Prado, Madrid, Spain
- 2016 *Take this Hammer*. Yerba Buena Center for the Arts, San Francisco, California, USA
- 2015 *Click, Drag, Fall Apart*. Refest Art+Tech Festival, La Mama Experimental Theater, New York, USA
- 2015 *Festival de Arte Interdisciplinar Cuerpo Estado*, Estación la Sabana, Bogotá, Colombia

PERFORMANCES

- 2019 *KEYS Algorave*, Trauma Bar und Kino, Berlin, Germany
- 2019 *CTM Festival*, Music Maker's Hacklab, Berlin, Germany
- 2019 *Viu Festival*, Live coded audio and visuals, Hangar.org, Barcelona, Spain
- 2019 *Algorave*, live visuals, International Conference on Live Coding, Madrid, Spain
- 2018 *Paradise: Return to Aja*. software and live visuals for theater. Dir. India Sky Davis. Brava Theater, San Francisco, USA
- 2018 *Quia, la misma otra de siempre*. Biblioteca Virgilio Barco, Bogotá, Colombia
- 2018 *Babycastles X LiveCodeNYC: Algorave Arcade*. Live code performance. *Performance Space New York*. New York City, New York
- 2018 *Algorave RGGTRN*, Plataforma Bogotá, Bogotá, Colombia
- 2017 *Nodos: Cuerpos en Expansión*. Festival de danza contemporánea CUERPO CONSTELACIÓN, La Libélula Dorada, Bogotá
- 2017 *Infinito*. Software and live visuals for theater. Dir. Rayo Lujan. Premio Iberescena. Teatro Eugene O'Neill, San Jose, Costa Rica.
- 2017 *Quia, la misma otra de siempre*. , Factoria L'éxplose, Bogotá, Colombia
- 2017 *Infinito*. Universidad de Antioquia, Medellín, Colombia
- 2017 *Infinito*. Residencia Factoria Léxplose, supported by the Ministerio de Cultura de Colombia. Bogotá, Colombia
- 2015 *QUIA, la misma otra de siempre*. Software and live visuals for dance. Dir. Edna Orozco. Premio funciones estelares, Fundación Gilberto Alzate Avendaño

RESIDENCIES

- 2018 *Digital Performance Residency*, Favoriten Festival. Dortmund, Germany
- 2017 *Residencia Colaborativa*, Platohedro, Medellín, Colombia
- 2016 *Choreographic coding lab. CCL #4*. Collaboration with Lisa Parra and Daniel Pinheiro, New York.
- 2016 *Interactivos? '16: Mundos Posibles*, Media Lab Prado, Madrid

TEACHING

2017-2018 **Intermedia-Redes**, Department of Visual Art, Pontificia Universidad Javeriana, Bogotá, Colombia

WORKSHOPS AND CONFERENCES

- 2019 *The browser as a modular, networked video synthesizer*, JSConf Hawai'i
- 2019 *Network ghosts: video feedback and algorithmic uncertainty* CTM Festival, Berlin
- 2019 *Hydra workshop*, Viu festival, Barcelona, Spain
- 2019 *Hydra, live coding workshop for high school students*, American Space Madrid, Madrid, Spain
- 2018 *Audiovisual creation with software libre*. FLISOL, open-source software festival. Bogotá, Colombia
- 2018 *Live coding: (a)sincronia audiovisual*. Plataforma Bogotá, Bogotá, Colombia
- 2017 *Browser as modular synth: live coding distributed and networked visuals*. International Conference on Live Coding, Morelia, Mexico
- 2017 *Hiperconectadxs*, Platóhedro, Medellín, Colombia
- 2017 *Cyborg dreams. Laboratory of machine-human creation*. Plataforma Bogotá, Bogotá, Colombia
- 2014 *Drawing with code: Javascript and analog creativity*, CaliJS, Universidad Javeriana, Cali, Colombia
- 2014 *Workshop: Mapping Repression and Resistance in the Bay Area*. LOL Oakland Makerspace, Oakland, California, USA
- 2014 *Intro to Creative Coding*. Bay Area Video Coalition, San Francisco, California, USA
- 2014 *Maps that Move*. CARTography GeoMixer, San Francisco Design Week, San Francisco, California, USA
- 2013 *Ellis Act Evictions*. Mapping and its Discontents, University of California, Berkeley, California, USA

EDUCATION

2007 - 2011 Stanford University, Stanford, California, USA

B.S. in Engineering-Product Design, minor in Computer Science

Coursework in Human-Computer Interaction, Electronics, Urban Design, Manufacturing, Digital and Electronic Art.

PROFESSIONAL EXPERIENCE

- 2018 - present **Developer**, Instituto Distrital de las Artes, Bogotá, Colombia
Develop applications, organize events, and lead workshops related to Art, Science, and Technology as part of IDARTES (District Arts Institute) of the city of Bogotá.
- 2017 - 2018 **Professor**, Pontificia Javeriana University, Bogotá, Colombia
Taught networking, programming, and new media to students in their 8th semester of the visual arts undergraduate degree.
- 2015 - 2017 **Programming Instructor**, Pixie Minds, Bogotá, Colombia
Taught video game design and development to young people ages 5 to 15 in public libraries throughout Bogotá. Introduced programming concepts through gameplay and storytelling. Created and documented lesson plans for diverse groups of students.
- 2014 - present **Software Developer**, Freelance
Develop software and interactive installations for cultural and educational institutions. Clients have included: CultureHub Art & Technology Center (NYC), Instituto Distrital de

Patrimonio Cultural (Bogotá), Organización de Estados Iberoamericanos, Museo de Bogotá.
Develop full-stack applications using JavaScript, React, NodeJS, and C++.

- 2011 - 2014 **Media Exhibit Developer**, Oakland Museum of California, Oakland, California, USA
Created installations about natural science in California as part of an interdisciplinary team.
Designed and developed educational interfaces for use in the gallery using JavaScript, Processing, and Flash.
- 2011 **Data Visualization Specialist**, Spatial History Lab, Stanford University, California, USA
Prototyped applications of data visualization in humanities and social sciences.
- 2010 **Programming Intern**, Alea Technologies, Teltow, Germany
Created an eye-gesture-based writing application in C# for computer users with limited speech and motor control.
- 2009 - 2010 **Flash Developer**, Biomechanical Engineering Department, Stanford University, CA
Designed and developed flash-based games for learning about electrical activity and blood flow through the heart.

SKILLS

Programming:

(Web) JavaScript, NodeJS, React, D3, WebGL, WebRTC, MongoDB

(Graphics/Installation) C++, OpenFrameworks, Processing, OpenGL, Kinect, OpenCV

Design: Illustrator, Photoshop, After Effects, Solidworks (CAD), ArcGIS

Languages: English, Spanish, some German