OLIVIA JACK

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EDUCATION

9/07 - 6/11 Stanford University, Stanford, CA
B.S. in Engineering-Product Design, minor in Computer Science
Coursework in Human-Computer Interaction, Electronics, Urban Design, Manufacturing, Digital Art.

EXPERIENCE

4/16-present **Programming Instructor**, Pixie Minds, Bogotá, Colombia
Teach video game design and development to young people ages 5 to 15 in public libraries throughout Bogotá. Introduce programming concepts through gameplay and storytelling. Create and document lesson plans for diverse groups of students.

6/14-present **Software Developer**, Freelance
Develop software and interactive installations for cultural and educational institutions. Clients include: 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++.

6/11 - 9/14 **Media Exhibit Developer**, Oakland Museum of California, Oakland, CA
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.

1/11 - 6/11 **Data Visualization Specialist**, Spatial History Lab, Stanford University, CA
Prototyped applications of data visualization in humanities and social sciences.

6/10 - 8/10 **Programming Intern**, Alea Technologies, Teltow, Germany
Created an eye-gesture-based writing application in C# for computer users with limited speech and motor control.

6/09 - 6/10 **Flash Developer**, Biomechanical Engineering Dept., Stanford University, CA
Designed and developed flash-based games for learning about electrical activity and blood flow through the heart.

RECENT PROJECTS

Live Lab, CultureHub Art + Technology Center, New York, NY, and Medialab-Prado, Madrid, Spain. 2015 - present
Developing an open-source, browser-based toolkit for networked performance, using a peer-to-peer mesh network to share audio, video, and data streams between performers and venues. Built using JavaScript, WebRTC, and WebGL.

Polifonías de Diversidad, Organización de Estados Iberoamericanos, Bogotá, Colombia. February 2016
Created interactive application highlighting diversity initiatives in education, for distribution to over 1,000 schools in Colombia. Built using JavaScript, React and Node-Webkit.

PIXELSYNTH, Chrome Experiments, 2016
Designed and developed a browser-based synthesizer for creating sound from images and drawings.

QUIA: the same other as always, Bogotá, Colombia, 2014 - 2016
Created interactive set design for the experimental dance performance QUIA, performed in Colombia, Croatia, and Costa Rica. Developed custom software for video mapping and generative sound using C++/OpenFrameworks and the Kinect V2 SDK. Led workshops on developing software for contemporary dance.

Observatorio de Saberes Urbanos, Museo de Bogotá and Instituto de Patrimonio Distrital, Bogotá, Colombia, 2015
Created a participatory cartography platform for visualizing the city through sound and memory. Built using NodeJS, React, and MongoDB.

Laboratory of Possibilities, Oakland Museum of California, Oakland, CA. June 2014
Created participatory media installation exploring dystopian and utopian futures through storytelling. Permanent exhibit in Natural Sciences Gallery. Built using NodeJS, Node-webkit, and MongoDB.

Anti-Eviction Mapping Project, San Francisco, CA. September 2013 - January 2014
Co-founded volunteer storytelling collective documenting gentrification and displacement in the San Francisco Bay Area. Created time-lapse maps of evictions using D3 and JavaScript.

Oakland Then and Now, Oakland Museum of California, Oakland, CA. June 2014
Produced map-based exhibit (using JavaScript and Google Streetview) for exploring historical ecology in the East Bay.

SKILLS

Programming:
    (Web) JavaScript, NodeJS, React, D3, WebGL, WebRTC, MongoDB
    (Graphics/Installation) C++, Processing, OpenFrameworks, OpenGL, Kinect, OpenCV
Design: Illustrator, Photoshop, After Effects, Solidworks (CAD), ArcGIS
Languages: English, Spanish, some German