# LOGAN WILLIAMS

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Currently, I am a Design Technologist at Stamen Design, leading data visualization projects for small and large clients. Previously, I built experimental media tools in the BuzzFeed Open Lab and worked on computational photography projects at Apple. I have particular interest in mission-driven data research for the public good, developing open source tools for data analysis, and communicating research through narrative, spatial, and interactive data representations.

# **EMPLOYMENT & RESEARCH**

#### Design technologist, Stamen Design - San Francisco, CA

June 2018 to Present

Creative coder and data-driven explorer at a small studio. At any given time, working on 3-5 projects as sole developer or leading small team, analyzing client datasets, collaborating with visual designers on exploratory design work, and managing client relations and expectations. Delivered creative solutions for large companies including Google and HERE, small organizations such as the National Audubon Society and Art Processors, and academic institutions.

#### Research fellow, BuzzFeed Open Lab - San Francisco, CA

October 2016 to October 2017

Fellow in residence within the Open Lab, a space for research in technology, journalism, and art. Analyzed social media data to understand social images and created a prototype web application for turning snapshots into stories, driven by a conversational user interface. Built tools for alternative photographic visualization and psycho-geo-spatial data analysis.

Image scientist, Camera Systems Engineering, Apple, Inc. — Cupertino, CA December 2014 to May 2016 Camera hardware intern, Camera Systems Engineering, Apple, Inc. — Cupertino, CA June 2013 to August 2013 Primary developer of a novel computational photography feature, including prototype hardware and iOS development. Collected and communicated manufacturing and testing data of precision CV hardware to a multi-disciplinary team.

**Teaching assistant, Introduction to EECS (6.01), MIT — Cambridge, MA**September 2013 to June 2014

Part of a team of faculty and students responsible for teaching and improving an innovative hands-on curriculum that introduced first-year students to foundational concepts in electrical engineering and computer science.

**Graduate research assistant, Micromechanics Laboratory, RLE, MIT — Cambridge, MA**October 2012 to June 2014

Designed, built, and tested a fiber optic apparatus capable of imaging motion within biological tissue on the scale of a single hydrogen atom. Performed optical, mechanical, electrical, and software development; responsible for project budgeting and management. Collaborated with researchers across disciplines to define specifications and goals.

Electrical engineering intern, MC10, Inc. - Cambridge, MA

May 2012 to August 2012

Responsible for designing and prototyping a low power body-area-network communication device.

Electrical engineer, Protei Project, V2\_Institute for the Unstable Media — Rotterdam, NL May 2011 to August 2011 Worked with a diverse team of artists and engineers to create a robotic sailboat for oil spill cleanup. Produced an open source document to share research methods, construction notes, test results, and possible future directions.

Research assistant, Tangible Media Group, MIT Media Lab — Cambridge, MA. Oct. 2009 to August 2010 Prototyped a 3D tangible communication device for children. Developed a 3D geospatial browsing interface.

## **EDUCATION**

#### Recurse Center - New York, NY

January 2018 to March 2018

Participant in the Recurse Center, a "self-directed, community-driven educational retreat for programmers." Focused on creating interactive media art, exploring geographic data, and contributing to open source projects.

#### Massachusetts Institute of Technology (MIT) - Cambridge, MA

September 2009 to June 2014

M.Eng. in Electrical Engineering and Computer Science, June 2014. Cumulative GPA 5.0/5.0.

Thesis: Design and implementation of a fiber optic doppler optical coherence microscopy system for cochlear imaging B.S. in Electrical Engineering and Physics, June 2013. Cumulative GPA **4.9/5.0**.

## SKILLS

- Data analysis, machine learning, and computer vision in Python, PyTorch, TensorFlow, OpenCV, Julia and R
- Data visualization and web cartography with D3.js, Leaflet, Mapbox, OpenStreetMaps, and vanilla JavaScript
- Software development for web, desktop and mobile in JavaScript/React/ES6, Python, C++/OpenFrameworks, and Go
- Backend web development with Go, Python/Flask, PostgreSQL, Meteor (Node/MongoDB), and Docker
- Circuit design and embedded hardware development with Atmel C, Arduino, and Raspberry Pi
- · Mechanical prototyping experience, including design in SolidWorks and fabrication with metalwork and 3D printing
- Native English speaker, proficient in technical writing and communication