

# RACHEL BOYCE

Software developer based in Boston, MA who crafts modern digital artifacts with holistic multimedia, satire, empowerment, and Javascript.

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## << SKILLS >>

- **Front-end:** Vanilla JS, Typescript, React, jQuery, D3, HTML5/CSS3 (incl. canvas and video), Wordpress, Jekyll
- **Back-end:** Node.js (incl. Serverless / AWS Lambda), Express, PHP
- **Web Design:** UX testing, Conversational UI
- **Multimedia:** Amazon Alexa, Arduino, Processing
- **Audio / Visual:** Adobe Photoshop & Lightroom, Final Cut Pro X, Audacity

## << WORK EXPERIENCE >>

**Software Engineer** :: Zmags (2017 - present) :: Boston, MA

I contribute to the design and development of Zmags' e-commerce web application. Front end engineering for new features in React / Redux and Typescript; support for older parts of the product with Backbone and Marionette.

>> I investigate new technologies and prototype new features for the product.

**Interactive Developer** :: Complex Networks (2016 - 2017) :: New York, NY

As part of the R&D team, I build front-end tools to deliver cutting edge multimedia as production features and proof-of-concepts apps that integrate with the company's digital publishing toolchain.

>> I research the latest in front-end interactivity, video content delivery, conversational UI.

**Web Developer** :: Freelance (2011 - present)

I craft web applications optimized for responsive design & dynamic content. I have experience in agency, academic, non-profit, and small business settings.

>> I specialize in digital media development, prototyping, and interactivity.

**Data Coordinator** :: Harvard Population Center (2009 - 2014) :: Cambridge, MA

At the [Pop Center](#), I managed collections of demographic cross-sectional & longitudinal datasets; performed preliminary analysis and data description in SAS & Stata. I provided IT support for a secure computer lab and website consultation for research projects.

**Research Assistant** :: Harvard School of Public Health (2006 - 2009) :: Boston, MA

In the Exposure Epidemiology and Risk Program, I performed data management & quality assurance with SAS, Excel, ArcGIS geospatial software package, and Teleform data collection imaging software.

## << EDUCATION >>

**Master's of Liberal Arts** :: Digital Media Design, March 2016

*Harvard University Extension School, Cambridge, MA*

My capstone project was *annotatAR*, lo-fi augmented reality for the mobile web.

**Bachelor's of Science** :: Biology, 2005 (Magna Cum Laude)

*Framingham State University, Framingham, MA*

## << RECENT PROJECTS >>

**Sneaker Searcher Chatbot** - Facebook chatbot for identifying sneaker models by image. Built with node.js using Serverless AWS Lambda.

>> Features >> API connection to machine learning photo identifier; content management by Facebook Chatfuel; integration with Slack to escalate to a human expert.

**Complex Toolbar Video Module** - Custom video player to deliver media to owned and operated webpages. Built with video.js.

>> Features >> Integration with Ooyala and Vidible content delivery; custom UI with vanilla JS; Google analytics integration.

**Complex Holiday Gift Guide** - Web application for displaying a calendar of gift suggestions. Built with Express for the back-end and Vanilla JS for front-end interactions.

>> Features >> API connection to custom content manager; ad units, social; media share integration with single-page interactions.

**Gentopo Generative Topography** - Web application for randomly generating topographical maps. Built with D3.

>> Features >> Unique topographical maps from Perlin noise; generation of named map features such as peak names and lakes; SVG export for printing.

## << COMMUNITY INVOLVEMENT >>

- Volunteer :: RailsBridge NYC (2016)
- Board of Directors :: Firefly Arts Collective (2013-2014)
- Education Director :: CEMI Electronic Media Institute (2012)
- Radio Host :: WMBR / 88.fm Cambridge (2011 - 2015)
- Volunteer :: FIGMENT Boston Interactive Arts Festival (2011 - 2014)

## << ETC >>

- NYC Meshnet grassroots internet collective
- DocShop interactive documentary working group at Harvard metaLab
- Visual artist & experience designer, Video Bleep collective
- DJ with Glitch.fm, Vermin Street