

RACHEL “RB” BOYCE

I'm a software developer based in Boston, MA who crafts modern digital artifacts with multimedia, empowerment, and Javascript. I create web applications optimized for responsive design & dynamic content. I have experience in agency, academic, non-profit, and small business settings.

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<< SKILLS >>

- **Front-end:** ECMAScript 6+, Typescript, Angular, React, jQuery, D3, HTML5/CSS3 (incl. canvas and video), Chrome Apps
- **Back-end:** Node.js (incl. Serverless / AWS Lambda), Express, PHP, MongoDB/Mongoose
- **Testing:** Karma, Jasmine, Mocha, Chai, Cypress
- **Multimedia:** Conversational UI (Alexa), Arduino, Processing

<< WORK EXPERIENCE >>

Web Developer :: Art of Context (2018 – 2020) :: Boston, MA

In this boutique interactive studio, I developed and maintained Chrome apps for digital airport signage. Wayfinders used custom content management for maps and markers. Information displays ingested airport data. Signage apps used multimedia assets, as well as i18n language and accessibility features.
>> I worked with a team to create interactive maps and information displays for airport customers.

Software Engineer :: Zmags (2017 – 2018) :: Boston, MA

I contributed 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 investigated new technologies and prototyped new features for the product.

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

As part of the R&D team, I built front-end tools to deliver cutting edge multimedia as production features and proof-of-concepts apps that integrated with the company's digital publishing toolchain.
>> I delivered the latest in front-end interactivity, video content delivery, conversational UI.

Web Developer :: Freelance (2011 – present)

I specialize in digital media development, prototyping, and interactive web projects.

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.

<< EDUCATION >>

Master's of Liberal Arts :: Digital Media Design, 2016
Harvard University Extension School, Cambridge, MA

Bachelor's of Science :: Biology, 2005 (Magna Cum Laude)
Framingham State University, Framingham, MA

<< RECENT PROJECTS >>

Customer Service App – Tablet-optimized Chrome application for Customer Service agents to use while assisting airport guests in information and wayfinding.

>> Features >> Kiosk application managed in Google Admin, Angular skeleton app with iFrames for integration with custom maps, Google map search, HelpDocs CMS API.

Flight Portal – Web applications for ingesting and correcting real-time airport data feeds for flights information, baggage claims, and check-in counters.

>> Features >> Mongodb with Redis queue for ingesting raw data, REST endpoint Express app, Angular front-end UI for manual overrides to data fields.

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 >>

- Help Desk & Product Development :: Frontline Foods (2020)
- Pod Leader :: Mutual Aid JP/Roxbury (2020)
- Coop Member :: MakeShift Boston (2018-2020)
- Volunteer Instructor :: RailsBridge NYC (2016)
- NYC Meshnet grassroots internet collective (2015 - 2017)
- DocShop interactive documentary working group at Harvard metaLab (2014 – 2015)
- 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)