# **Hamilton B Sands**

Brooklyn, NY • 917-841-9676 hamiltonbsands@gmail.com



#### **EXPERIENCE**

## Fullstack Software Engineer • RUN/Publicis Media

Jul 2018 – Present

Developed a redesigned portal for a multi-million dollar demand side platform (DSP)

- Built a single page React/Redux app used by in-house ad-ops teams and later self-service clients
- Expanded and maintained a Rails/Mongoid API integrating with SideKiq, Redis, ElasticSearch, AWS S3, and internal bidder/banker APIs
- Optimized landing page performance by over 400% using automated scripts to aggregate hourly ETL data transfers from the data team
- Implemented our user permissions system as part of a two person team, providing campaign level granularity and user management for team leads
- Created a sophisticated geolocation targeting tool using MapboxGL capable of rendering thousands of geo-shapes
- Collaborated with product to develop bulk-workflow tools for campaign managers, saving 40+ hours of data entry work per week
- Used D3 and Material UI to make custom data visualizations and build stylish components

# **Draftsman • David Sands Designs**

Jun 2016 - Oct 2017

Drew layouts/elevations using AutoCAD. Translated 2D layouts into 3D models using SketchUp.

#### **Lab Technician** • Lab in Learning and Representation in Cognition

Jun 2014 – Jun 2016

Coded implementations of a multichannel auto-encoding neural network (DIVA). Optimized neural network parameters to best replicate human classification behavior from previous experiments.

### **PROJECTS**

AmoeBoi | JavaScript

Repo | Live

A become-the-largest type game akin to agar.io

- Designed a custom physics engine to handle absorption rates, acceleration, collisions, etc.
- Utilized a quadtree to store all objects on the field, optimizing the collision detection algorithm

**WaveForm** | React • Redux • Rails • AWS

Repo | Live

A single page website inspired by SoundCloud (my first project!)

- Leveraged AWS S3 for quick retreival of large mp3 files and future scalability
- Preloads audio content to provide stable playback during network interruptions

#### SKILLS

JavaScript • React • Redux • Webpack • Ruby on Rails • Mongoid • PostgreSQL • HTML5 • CSS3 • RSPEC • JEST

#### **EDUCATION**

App Academy

Nov 2017 – Feb 2018

1000+ hour full stack web-development program with < 3% acceptance rate. Emphasizes best practices and pair-programming exercises.

**SUNY Binghamton** 

Sep 2012 – May 2016

B.A. Psychology, GPA: 3.54 Cum Laude

**Stuyvesant High School** 

Sep 2008 – May 2012