# **Zachary Espiritu**

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### Education

**Brown University** · May 2021 **Sc.B.** Computer Science · GPA: 4.0

Regis High School · June 2017

## Skills

## Languages

Ruby · Python · Swift · Objective-C · Java · C · Assembly · HTML / CSS · JavaScript · Racket · Pyret · Matlab

#### **Technologies**

Rails · React · Sass · jQuery · Heroku · Docker · PostgreSQL · Mixpanel · Firebase · LaTeX

## Design

Figma · Sketch · InDesign · Photoshop · InVision · Adobe XD

## Coursework

Accelerated Intro to Computer Science (Algorithms, Data Structures, Functional Programming) Computer Systems

Discrete Structures and Probability
Logic for Systems (Formal Model
Verification, Proofs of Specifications)
User Interfaces and User Experience

### Activities

Musical Forum · Board Member
Theater group at Brown producing 3–4
shows per semester; five years of
lighting design over 15 productions.

Critical Review · Staff Writer
Organization that generates
aggregated student reviews of
undergraduate courses at Brown.

## Experience

## **Brown University**

Fall 2017 – Present

Teaching Assistant for CS5 (Fall 2017), CS4 (Spring 2018)

Worked with a team of TAs and course professors for different courses each semester. Answered student questions during weekly office hours.

## **Negotiatus**

Summer 2017

## Software Engineering Intern

Co-developed automated sales lead information validation tool. Streamlined operations team workflows with Slack integrations and automated price comparison tools integrated with product vendor APIs. Optimized PostgreSQL queries for up to ~500x faster full-text searches.

## **Negotiatus**

Summer 2016

### Software Engineering Intern

Created client-facing system for customers to automatically schedule recurring orders. Set up continuous integration pipeline and co-wrote test suite from scratch for several thousand lines of code with over 70% coverage. Built web scrapers to automate previously manual product price point collection. Led development of company Ruby style guide.

# **Projects**

(many more at zacharyespiritu.com)

### Math Battle

10Under20 at CEWeek 2016 Recipient (Educational Technology)

Real-time, online, competitive math puzzle experience on iOS.

## Tile, Tap, Push!

7000+ Downloads & "Audience Choice" at Make School Demo Day Two-player iOS game about tapping tiles in split-screen multiplayer.

### **Github Dating Simulator**

Ruby on Rails web app that analyzes Github profiles and creates best-fit hackathon teams using statistics and the Github API.

## Awards

(many more at zacharyespiritu.com)

UI/UX Winner @ Brown University Adobe Design Jam	Oct 2017
2nd Place at Microsoft Coding Challenge @ Brown	Sep 2017
Louise O'Rorke Award for Dramatics & Lighting Design	June 2017
10Under20: Young Innovators to Watch @ CEWeek	June 2016
Congressional App Challenge Winner in Washington, D.C.	Feb 2016