# **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 · Alloy · Rosette · Spin

#### Prototyping

Figma · Sketch · InDesign · Photoshop · Adobe XD

#### Coursework

Accelerated Intro to Computer Science
(Algorithms, Data Structures,
Functional Programming)
Computer Systems Security\*
Discrete Structures and Probability\*
Introduction to Computer Systems
Linear Algebra\*
Logic for Systems (Formal Methods
and Verification in Programming)\*
User Interfaces and User Experience

#### Activities

\* in progress

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

## Experience

#### **Brown Computer Science Department**

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 online through Piazza and in-person during weekly office hours. Graded student assignments.

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 using NLP. Led development of company Ruby style guide.

## **Projects**

(many more at zacharyespiritu.com)

#### Math Battle

10Under20 at CEWeek 2016 Recipient for 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
Apple WWDC Scholarship Winner	June 2017
10Under20: Young Innovators to Watch @ CEWeek	June 2016