

# 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 • PHP • Racket • Pyret •  
Go • Matlab • Bash

### Technologies

Rails • React • Sass • jQuery •  
Heroku • Docker • PostgreSQL •  
Alloy Analyzer • TLA+

### 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

**Musical Forum** • Board Member

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

**Brown Daily Herald** • Designer

## Experience

**Brown Computer Science Department** Fall 2017 – Present

Head Teaching Assistant for CS19 (Fall 2018)

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

Worked with team of TAs and organized logistics for different courses each semester. Answered student questions online and in-person during weekly office hours. Developed course assignments. Graded student submissions.

### 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.

### collab/space

hack@brown 2018

An online IDE built using Meteor and React for real-time peer collaboration  
via a live-updating editor, in-browser code compilation, and video chat.

### Tile, Tap, Push!

7000+ App Store Downloads & "Audience Choice" at Make School

Two-player iOS game about tapping tiles in split-screen multiplayer.

## Awards

(many more at zacharyespiritu.com)

2nd Place at Microsoft Coding Challenge @ Brown

Sep 2017

Apple WWDC Scholarship Winner

June 2017