

# 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

### 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

*\* in progress*

## 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

## 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.

### 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)*

#### 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