

# Gus Cantieni

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## education

**Brown University** B.S. in Computer Science  
**Class** 2020  
**GPA** 3.9

**Relevant Coursework** Computer Networks, Deep Learning, Object Oriented Programming, Computer Systems, Logic for Systems

## work experience

### summer software engineer

**Open Learning Exchange** Cambridge, MA

*May–September 2018*

- Designed scalable loading interface for Angular app
- Refactored and debugged password validation
- Gained familiarity with Git, Angular 6, CouchDB, Docker, and Vagrant
- Pitched app at Cambridge Innovation Center conference, drawing in seven potential clients

### computer systems teacher's assistant

**Brown University** Providence, RI

*September 2018–present*

- Helped three hundred students with tricky bugs and conceptual questions during weekly lab and code hours
- Assessed students' performance and offered feedback during weekly gradings
- Gained a thorough understanding of C, x86, processes, multi-threading, mutexes, and signal handling

## projects

### tcp

**Brown University**

*November 2018*

- Implemented Transfer Control Protocol, the backbone transport protocol of the modern internet
- Built a reliable and fault-tolerant system using ACKs, timeouts, and retransmission
- Created a distributed system of nodes with virtual IP addresses and used the Routing Internet Protocol (RIP) to populate their routing tables and find remote addresses
- Overcame subtle concurrency-related bugs and deadlocks through persistent and systematic debugging
- Collaborated with a tight-knit team of students, keeping an organized list of bugs and suggesting methods to divide and conquer
- Learned Golang and the use of channel oriented concurrency

### hive mind

**Personal project**

*August 2018*

- Self-taught the syntax and tooling of modern JavaScript by implementing a simple strategy game
- Explored both object oriented and functional styles
- Experimented with different JavaScript libraries and approaches, learning how to host a webpage, bundle and transpile JavaScript files, and incorporate npm (node package manager) libraries

### oasis

**Personal project**

*October 2017*

- Spearheaded Android development and conceptual design for app that connects those who have experienced personal tragedies
- Unsupervised machine learning algorithm connects users of similar background and demographic
- Represented Brown in hackathon and competed against more than 500 students

## skills

### languages

Golang, Python, JavaScript, C, Java

### technologies

Linux,  $\LaTeX$ , Angular 6, Vim, Git