

# 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

### software research intern

**DellEMC** Cambridge, MA

*June 2019–August 2019*

- Worked with small team researching Developer Operations and rapidly deploying internal apps
- Developed tools for admins to take control of internal reviewing resource, improving efficiency in React web application
- Researched Virtual Reality and Natural Language Processing using Python
- Honed development skills by practicing Extreme Programming with TDD, pair programming, continuous integration, and continuous deployment

### software engineering intern

**Open Learning Exchange** Cambridge, MA

*May 2018–September 2018*

- Pitched app at Cambridge Innovation Center conference, drawing in seven potential clients
- Gained a familiarity with an agile and entrepreneurial working environment
- Designed scalable loading interface and password validation for Angular app
- Gained familiarity with Git, Angular 6, CouchDB, Docker, and Vagrant

### 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

### gan

**Brown University**

*November 2018*

- Designed and trained an adversarial neural network written in Python and Tensorflow that learned to generate celebrity faces
- Learned to use Python utilities to parse data, and Tensorflow's API to train multi-layered neural networks
- Analyzed and quantized the effects of different combinations of neural-net architectures and parameter choices, eventually producing frighteningly uncanny celebrity faces

### 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

## skills

### languages

Golang, Python, JavaScript, C, Java

### technologies

React, Angular, Linux,  $\text{\LaTeX}$ , Vim, Git