# Michael Tran

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### Education

#### Tufts University School of Engineering

Somerville, MA

B.S.C.S. Computer Science — B.S. Mathematics GPA: 3.4

August 2012 - May 2016

- Important Courses:
  - \* Computer Science: Statistical Pattern Recognition, Programming Languages, Web Programming, Algorithms, Computer Security, Machine Structure, Digital Logic Circuits
  - \* Math: Abstract Algebra, Real Analysis, Computational Geometry, Linear Algebra, Probability, Discrete Mathematics

# Experience

### Tufts University (Math Department)

Medford, MA

Grader

September 2015 - Current

- graded for a class of 34 students

CoreLogic

Irvine, CA

Product Development Software Engineering Intern

 $June\ 2015-September\ 2015$ 

- wrote Python scripts to help automate the development mockup process necessary in a system migration
- wrote Python scripts to monitor the performance metrics of different application builds in AppDynamics and QuickBuild
- worked on UX features and debugging in the Admin web application front end built using Javascript and Ext JS

# Star Bright Cleaners

Las Vegas, NV

Front Desk Clerk

June 2014 - August 2014

- Processed and recorded cleaning orders
- Effectively handled customer issues and transactions
- Balanced cash registers at the end of each business day

# Tufts University (Computer Science Department)

Medford, MA

Teaching Assistant

January 2014 - June 2014

- Worked directly with and assisted students during weekly office hours
- Graded and debugged student submissions, projects, and design documents
- Taught weekly labs where students practiced programming skills such as sorting, recursion, and dynamic memory

#### Skills

Languages: C/C++, Python, Javascript, Java, Go, Ruby

Computer and OS: Linux/Unix, Vi/Vim, Windows, VMWare, IntelliJ

Libraries and Tools: Git, Subversion, Vi/Vim, zsh, Ext JS, IntelliJ, NumPy and pandas

#### **Projects**

Network Alarm: This alarm monitors either a live stream of network packets or an Apache web log for a variety of incidents. Implemented in Ruby, the program detects port scanning attacks and leaked credit card information in a live network stream. Given a web log, the program detects NMAP scans, HTTP error codes, embed shellcode, and leaked credit card information.

Mark and Sweep Garbage Collector: A mark-and-sweep garbage collector that was implemented for a Scheme interpreter and written in C.

Running Champ: This web application allows users to compete with other local users and quantitatively track their running progress. The application is published to appspot and records run data using the Google Maps API. User logins are handled using tokens and a two key encryption algorithm.